

Landfill Criteria Public Comments Received

February 9, 2018

Borings taken prior to the construction of the IWMM site indicate that it is underlain by low permeability Taylor Formation clays which are relatively impervious to vertical migration of liquids. Because a complete list of the chemicals disposed of in these cells is unavailable, the composition of the solvents and other chemicals in drums that were landfilled at IWMM is not entirely known and therefore presents some environmental risk. Certain chemicals, particularly chlorinated solvents, have the potential migrate easily through soils and clays and would pose an environmental threat where present.

The unknown contents and condition of the 21,000 buried drums presents a potential environmental risk. If the contents of the drums are still present at the site, but no longer contained by the drums, there is risk that the material could enter groundwater or surface water and leave the site. Currently there are no monitoring wells being sampled in the vicinity of the former IWMM site and no certain way to determine whether the IWMM site has released contaminants, although there is some evidence that the groundwater may have been impacted locally (*Section 7.A.2*). As long as the industrial waste remains buried at the current location it will be a source of environmental risk.

5. Other Potential Liabilities

NPL Listing

A Petition for National Priority Listing (NPL) has been filed with the EPA Region VI Office concerning property which is located adjacent to the Austin Community Landfill. It is Carter & Burgess' understanding that the property is now owned by Waste Management of Texas but is not included within the property boundaries of TNRCC permit currently in effect for the Austin Community Landfill (TNRCC Permit 249-C). The subject property is the approximate site of the former IWMM facility. The IWMM facility was originally part of the ACL site, but became an excluded portion by virtue of a permit amendment approved by the TDH in July 1981 shortly thereafter, Waste Management of North America purchased the permitted portion of the ACL site as well as the area known as the former IWMM site.

Legal counsel retained by Carter & Burgess has requested all documents related to the matter pursuant to the Freedom of Information Act. As of the date of this report the EPA representatives have informed our legal counsel that a Preliminary Assessment of the site has been completed. The results of this assessment and any subsequent actions which may be taken by the EPA or State Agencies were not provided to our legal counsel who are researching this issue.

Carter & Burgess understands that potential liability for the City of Austin could arise if a portion of the ACL itself were declared to be a federal or state superfund site. This would appear possible only if contaminants from the former IWMM site migrated onto the ACL or if contaminants from the ACL migrated onto the IWMM site. We also understand that the EPA does not generally identify generators and transporters of MSW as potentially responsible parties (PRPs) at NPL sites. However, municipalities are still responsible under §107 of CERCLA for contribution claims by PRPs. This liability would only arise if Waste Management's financial cleanup reserves proved inadequate for the cleanup.

Under state law, a site not meeting the federal guidelines for NPL listing could still be named a state superfund site. In that event the City of Austin could be named as a PRP to perform cleanup if the City of Austin's wastes were comingled with wastes determined to be part of the state superfund site. If the City of Austin could show that its wastes were divisible from the superfund wastes, then it would only be responsible for the cleanup of its own wastes.

Liability for the City of Austin would only arise if Waste Management's financial reserves proved inadequate.

Phase 1 Seeps

The leachate seeps on the Phase 1 area will continue to be a problem requiring management by Waste Management of Texas. With time the seeps will worsen and the condition of the Phase 1 cap and cover will worsen if the leachate is not removed from the Travis County Landfill. This situation presents long term risks and is a potential liability to the operators of the landfill.

B. BFI Sunset Farms Landfill

1. Regulatory Compliance

The Sunset Farms site is currently and historically has operated in substantial compliance with applicable state and federal MSW regulations established for Type I landfills. Only one violation was noted for the site for the period in which agency inspection records were available (November 1992 to present). This violation occurred on July 10, 1997, and involved the exceedance of regulatory levels for methane gas (30 TAC 330.130). A letter was sent to BFI describing corrective actions to be taken. No further incidences of this type have been reported at the site. Only four relatively minor complaints were noted (involving items such as truck washing activities, uncovered trucks, a leak of hydraulic fluid from one truck, and discharges from an AST flowing towards a storm drain). Records indicated that all of the complaints were satisfactorily addressed and resolved.

2. Present Environmental Impacts

Groundwater

Organic Impacts

Organic constituents have been detected in monitoring well MW-9 near the southwest corner of the site. These organic constituents have been present in this well since before BFI expanded landfill operations onto that portion of the property. The impacted groundwater occurs in the weathered Taylor Clay, and is likely associated with similar impacts observed in monitoring well MW-5 located near the northwest corner of the ACL site (adjacent to the southwest portion of Sunset Farms facility). Organic constituents were first detected in MW-9 in 1993 and were present in groundwater samples collected from this well until it was plugged in 1998. Only TCE has been detected at concentrations slightly above its MCL and is apparently restricted to this portion of the property, and may be associated with landfill gas generation on the ACL site.

Inorganic Impacts

Although metals concentrations were detected on occasion at concentrations above their respective MCLs in some of the pre-Subtitle D monitoring wells, these observations may be typical for the weathered Taylor Clay and a result of the concentration of inorganics due to dry weather conditions or possible dewatering of the aquifer. A better assessment of the significance of the inorganic concentrations measured in groundwater may be possible after the facility has completed background monitoring and statistical data analysis required by Subtitle D regulations (in about two years).

Surface Water

Data reviewed as part of this assessment showed no indication of impacts to surface water.

Landfill Gas

The Landfill Gas Recovery System, and electric generating facility which has been in operation for two years, are apparently effective at controlling the gas buildup within the landfill. Since the installation of the generating facility there has been one sampling event when methane was detected in one gas monitoring probe at a concentration above the LEL.

3. Possible Future Impacts

Groundwater

Based on personnel interviews, a site inspection, and review of available documentation, BFI appears to operate the Sunset Farms Landfill in a responsible manner protective of groundwater and surface water. The potential for future impacts to groundwater at the Sunset Farms Landfill is considered to be relatively low. Continued monitoring for VOCs and statistical determination of background metals concentrations as part of the Subtitle D monitoring program, should provide data to make a more thorough assessment of potential future impacts.

Surface Water

The likelihood of future impacts to surface water at the Sunset Farms Landfill is considered to be relatively low.

4. Environmental Risks

Based on the hydrogeologic setting, landfill design and construction, and operating practices observed at the Sunset Farms site, environmental risk related to groundwater and surface water are considered to be low.

5. Other Potential Liabilities

Potential exists for groundwater beneath the BFI facility to be impacted as a result of operations at the ACL to the southwest. It has already been noted (*Section 7.B.2*) that MW-9 had detected organic constituents before BFI had landfilling operations in the area and that the most likely source is the ACL to the south. If the groundwater were found to be impacted beneath some of the surrounding properties the BFI landfill might be considered a potential source of contamination and would be required to defend itself against possible future claims.

C. Texas Disposal Systems Landfill

1. Regulatory Compliance

The TDS landfill has been in operation for about 8 years. The Landfill was designed in accordance with pre-Subtitle D regulations and was placed into service in 1991. The original design specified in-situ soil liners for the landfill bottom and unweathered clay sidewalls. Weathered sidewall areas, as identified in the geologic study, were to be lined with a minimum of three feet of compacted clay. The sidewall liner thickness is increased to compensate for potentiometric head from adjacent undisturbed areas. The original final cover design included 1.5 feet of compacted clay overlain with 1 foot of topsoil. No leachate collection system was originally proposed for the landfill. In 1994, TDS submitted permit modification documents to comply with Subtitle D. These modifications made no changes to the bottom and sidewall liner designs. The final cover design was changed to 4 feet of topsoil over the 1.5-foot compacted clay cover. Leachate collection systems were designed and installed in post-Subtitle D sectors. Based on a review of SLERs and permit documents, TDS has constructed the landfill in substantial compliance with its approved permit.

During the period of operation of the landfill, two violations were cited by the regulatory Texas Disposal Systems

agency in 1992. One violation was for lack of intermediate cover on the waste materials and the second violation was for tracking mud onto F.M. 1327 by trucks leaving the landfill. To the best of our knowledge, both violations were promptly corrected without further enforcement action. No fines are known to have been levied. During the course of the landfill life, a total of seven complaints have been reported to the regulatory agencies. Each complaint was investigated by an agency inspector who met with TDS over the alleged problem conditions. No violations were found as a result of the complaint investigations.

2. Present Environmental Impacts

Groundwater

No present environmental impacts were observed or indicated by this assessment. The review of groundwater data indicated that groundwater quality has changed little since operation of the landfill began. The only potential indicator of impact is the increase in TOC concentrations since 1995; however, based on the distribution of TOC concentrations (very consistent in all wells sampled), the increase in TOC is likely the result of something other than landfill operations, such as climatic events (drought/storm events).

Surface Water

No evidence of surface water impacts were indicated by this assessment.

Landfill Gas

No evidence of landfill gas reaching the property boundary were indicated by this assessment.

3. Possible Future Impacts

Based on personnel interviews, a site inspection, and review of available documentation, indications are that TDS is a very responsible operator, and will continue to take all necessary measures to protect groundwater and surface water at the site.

Based on the types of waste managed and disposed at the TDS facility, the liner design used should prevent migration of leachate from the landfill cells. The concern about leachate noted during the assessment of this site is associated with the pre-Subtitle D portion of the Phase 1 area, which has no leachate collection system; however, the design of the landfill should allow the leachate from this area to drain into areas with leachate collection or to sumps where the leachate will be pumped out. The current and future groundwater monitoring system should be adequate to detect any potential problems before contaminants leave the site.

4. Environmental Risks

Based on the hydrogeologic setting, landfill design and construction, and operating practices observed at the TDS Landfill, environmental risks related to groundwater water, surface water or any other medium are considered to be relatively low.

8. RECOMMENDATIONS

A. Need for Additional Studies

It is the Carter & Burgess team's opinion that the former IWMM site at the ACL poses a substantial environmental risk and future liability to the owners of the site and potential users of

the site and should be investigated and monitored more thoroughly than it is now to reduce these potential risks.

Although any releases to groundwater and surface water from the site may be detected by the existing network of downgradient monitoring wells, it is possible that contaminants could be released to surface water or deep groundwater without detection. A more thorough assessment would be required to determine the potential for (or prior occurrence of) vertical migration of solvents and other chemicals previously disposed of at the IWMM site. This assessment should include an up-to-date and independent search of water wells in the area to determine if contaminants associated with the IWMM site have been detected in these wells or if deeper water-bearing zones have been impacted. The assessment should also include the installation of two to four exploratory borings to the first water-bearing zone directly beneath the IWMM site (possibly the Austin Chalk or the Edwards). These borings should be completed as permanent groundwater monitoring wells and be sampled for contaminants known to be present at the IWMM site. It would be best to perform this investigation in conjunction with waste excavation at the IWMM site if the site is remediated in the future. This would make it possible for the wells be drilled directly through the former IWMM location rather than around its perimeter and would provide a more accurate assessment of possible vertical migration.

Leachate seeps from the ACL Phase 1 MSW area adjacent to the Travis County Landfill are a constant threat to surface water runoff. It is recommended that the leachate level in the Phase 1 area be monitored to act as a warning for potential increased seepage activity. It is also recommended that the leachate from the seeps at the Phase 1 site be sampled and analyzed regularly to determine potential impacts to surface water in the tributary to Walnut Creek. Although the Travis County Landfill is not the subject of this assessment, it has a direct effect on environmental conditions of the area. The numerous seeps at the Travis County Landfill site indicate that the leachate level is high within the landfill and should be monitored to warn of potential increased seepage activity. It is also recommended that leachate from the monitoring wells at the site be sampled and analyzed.

Continued monitoring of the western portion of the ACL site (southwest portion of BFI site) in the vicinity of MW-5 and near MW-21 should continue in order to monitor the concentrations of chlorinated solvents in these areas. Additional monitoring wells should be required to more precisely determine the extent and source of chlorinated hydrocarbons present in groundwater at concentrations above the MCLs. The BFI landfill has just completed installation of a 16-well groundwater monitoring system from which background data will be gathered for the next two years, followed by quarterly monitoring. Statistical analysis of the groundwater data will provide more information regarding possible impacts to groundwater. To date there have been no SSCs that would indicate impacts to groundwater.

Monitoring systems at the TDS Landfill are considered to be adequate for that site.

B. Need for Corrective Action

Carter & Burgess' team has concluded that the former IWMM site will continue to pose an environmental threat as long as the drummed and other industrial waste remain buried at its present location. Waste Management has submitted a Work Plan to the TNRCC to uncover the buried waste and properly dispose of it either offsite or in a Class I nonhazardous cell which is already permitted at the ACL. Removal and proper disposal of this waste would eliminate or substantially reduce the environmental risks associated with the site. This work would involve excavation of the soil above the waste followed by sampling and analysis of the waste to determine proper disposal requirements. Waste determined be hazardous should be handled accordingly and prepared for shipment to a licensed hazardous waste disposal facility (landfill or other). Waste determined to be nonhazardous could be transported the approved Class I nonhazardous waste cell at the ACL. The removal action should be supervised by an experienced environmental professional, and could include oversight by an impartial independent

environmental professional to satisfy concerns expressed by neighborhood groups. All necessary precautions should be taken to prevent releases to the environment (air and surface water) during the removal action. Upon removal and proper disposal of all waste and impacted soils, the site should be backfilled with clean fill.

Carter & Burgess also recommends that the ACL work with Travis County to reduce leachate buildup in the Phase 1 area which is directly influenced by conditions at the Travis County Landfill.

It is our understanding that the waste (and most likely, leachate) is contiguous between the Travis County Landfill and Phase 1 area. In order to alleviate the problem of leachate seeps in the Phase 1 area, it would be necessary to perform maintenance work on the Travis County Landfill as well. We recommend that leachate recovery be initiated through the existing system at the Travis County Landfill in order to lower the leachate levels, thus mitigating leachate seeps in the Phase 1 area as well as the Travis County Landfill.

Once the fluid level within the landfill is lowered, repair work could be done on the cap and cover of the Travis County Landfill and on the seeps in the Phase 1 area. The thickness of the cover should be increased to properly cover exposed waste, and the cap and cover should be seeded and vegetative cover maintained to reduce future infiltration of rainwater into the landfill and to prevent possible erosion of the final landfill cover. Repair and proper maintenance of the Travis County Landfill and Phase 1 area would reduce the potential for major impacts to surface water quality in the area. The potential also exists that after water levels are lowered in the landfill, concentrations of landfill gas could accumulate. Therefore, monitoring of landfill gas should be conducted as the landfill is dewatered.

9. LIMITATIONS OF ASSESSMENT

The findings and conclusions expressed in this report were prepared by Carter & Burgess' for the sole and exclusive use of the City of Austin. The information presented in this report was obtained from a variety of sources, including regulatory agency files and records, documents provided by third parties, data collected from the landfill operators, and site visual inspections. This material represents all available factual information related to the environmental safety of the various landfills. The information and data obtained from these sources was assumed to be correct and valid, and independent verification of the information and data was not performed by Carter & Burgess. Carter & Burgess assumes no responsibility for inaccuracies or the completeness of data and other information reviewed as part of this assessment.

The environmental assessment described herein was based on the specific and limited objectives set forth in the Professional Services Agreement entered into with the City of Austin. The assessment was conducted in a manner consistent with the level of care and skill ordinarily exercised by members of the environmental and engineering professions practicing contemporaneously under similar conditions in the locality of the project. No other warranty or guarantee, expressed or implied is made, other than the work was performed in a competent and professional manner.

FIGURES

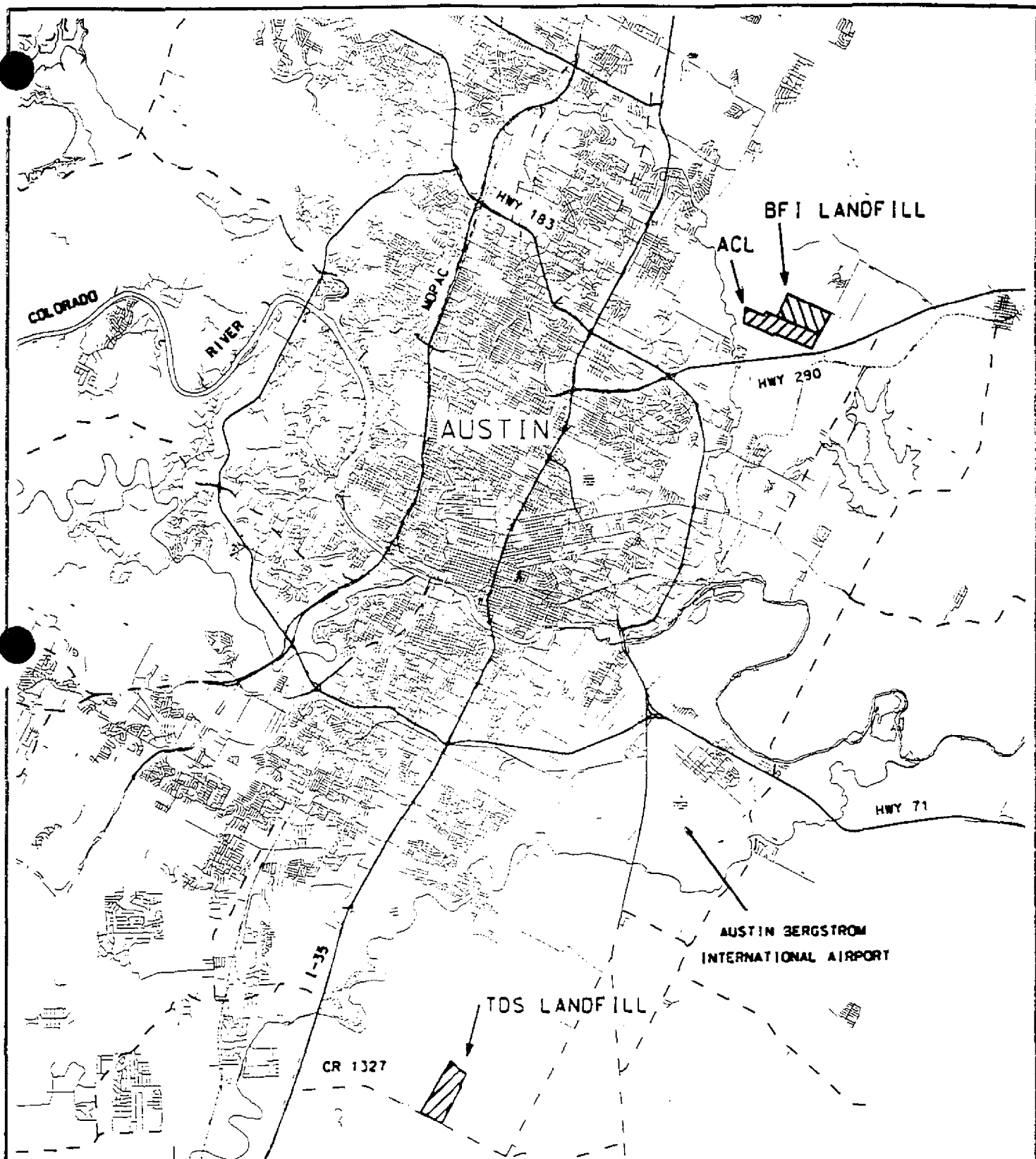


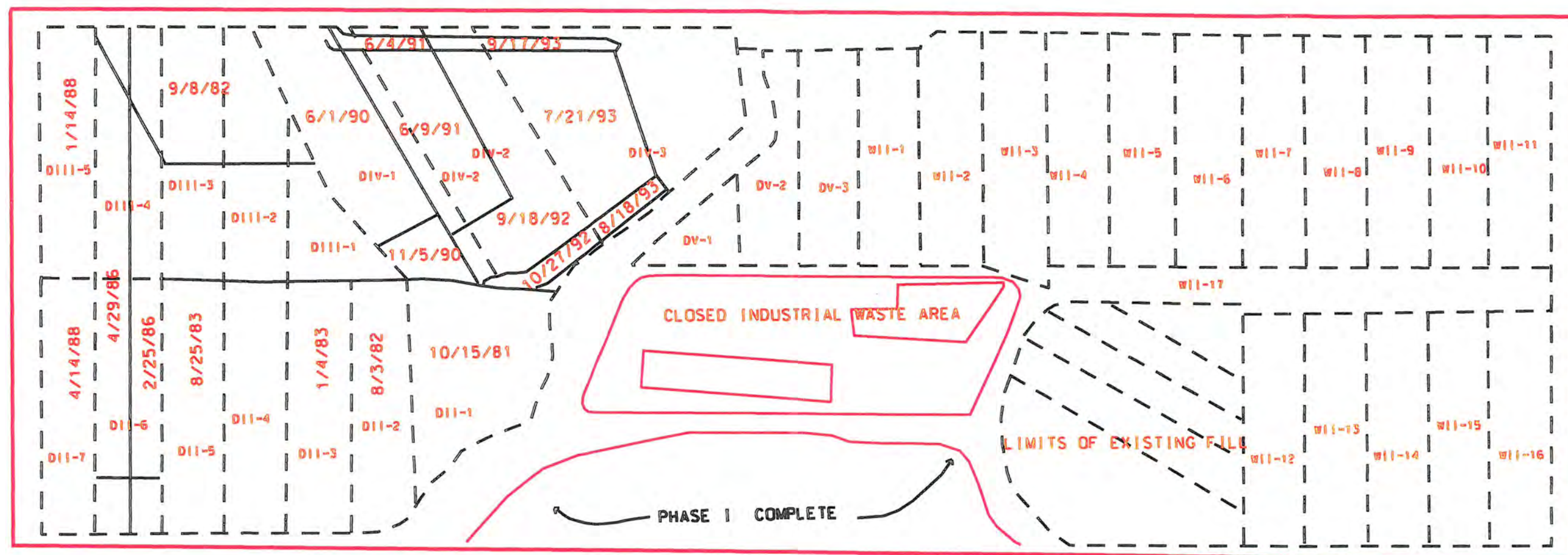
FIGURE 1: LOCATION MAP
AUSTIN AREA LANDFILLS





FIGURE 4: SITE LAYOUT
TEXAS DISPOSAL SYSTEMS LANDFILL





NOTE:

IN ACCORDANCE WITH TEXAS DEPARTMENT OF HEALTH REGULATION NO. 325.602 (c). GRID MARKERS WILL BE SPACED ALONG SITE BOUNDARIES AT 100 FOOT STATIONS. THESE MARKERS WILL BE INSTALLED TO ENCOMPASS THE CURRENT FILL AREAS AND THE AREAS TO BE FILLED WITHIN A THREE YEAR PERIOD AND EXPANDED PROGRESSIVELY AS NEEDED.

LEGEND

— — — — — PROPERTY LINE
 - - - - - LIMITS OF FILL SECTORS

FIGURE 5: AUSTIN COMMUNITY LANDFILL
 SECTORIZED FILL LAYOUT

Carter-Burgess

901 South MoPac Expressway
 Barton Oaks Plaza V, Suite 200
 Austin, Texas 78746
 (512) 314-3100

SOURCE: PITTMAN ENGINEERING

Texas Disposal Systems



AREA OF LECHATE SEEPS

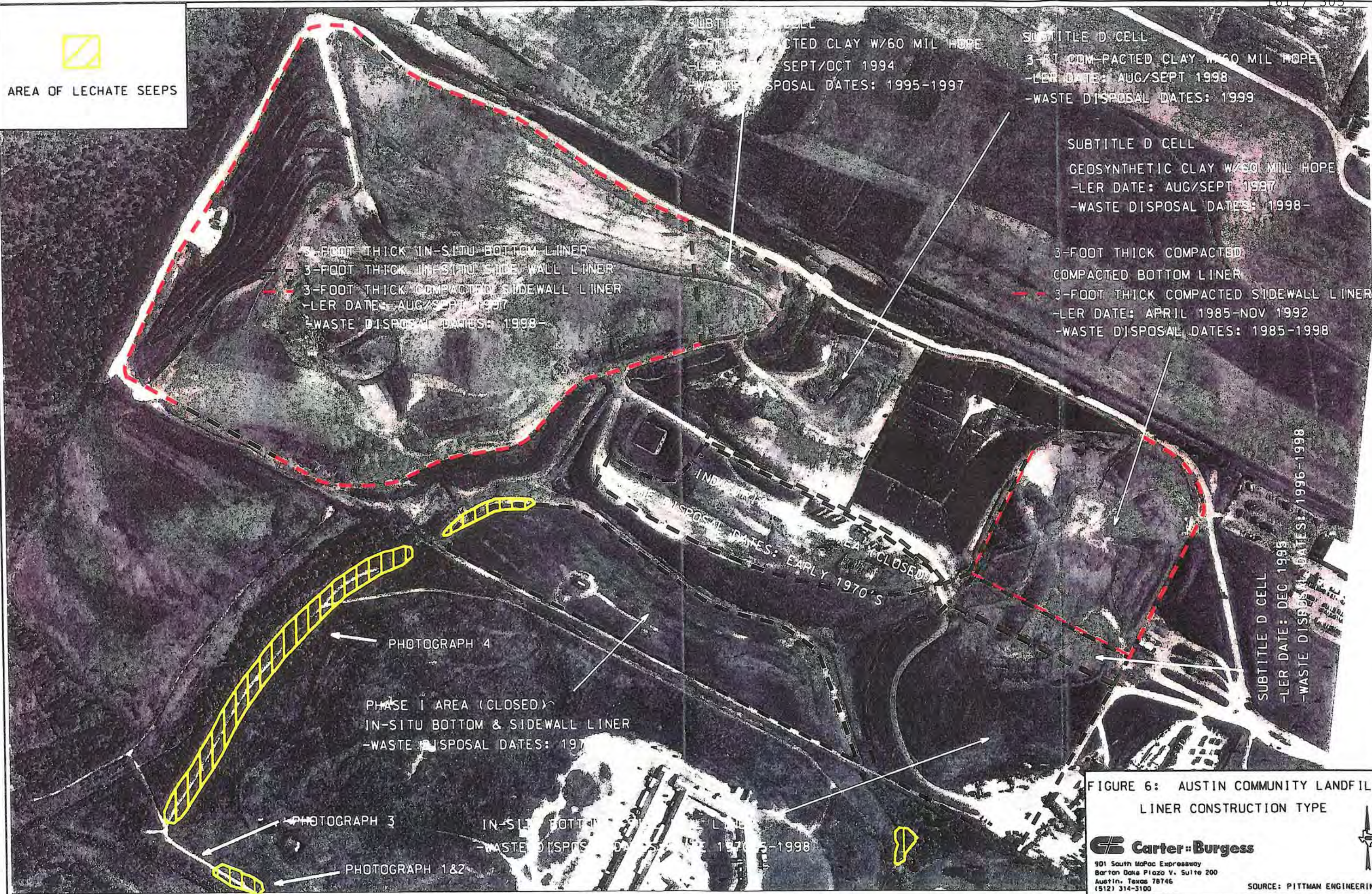


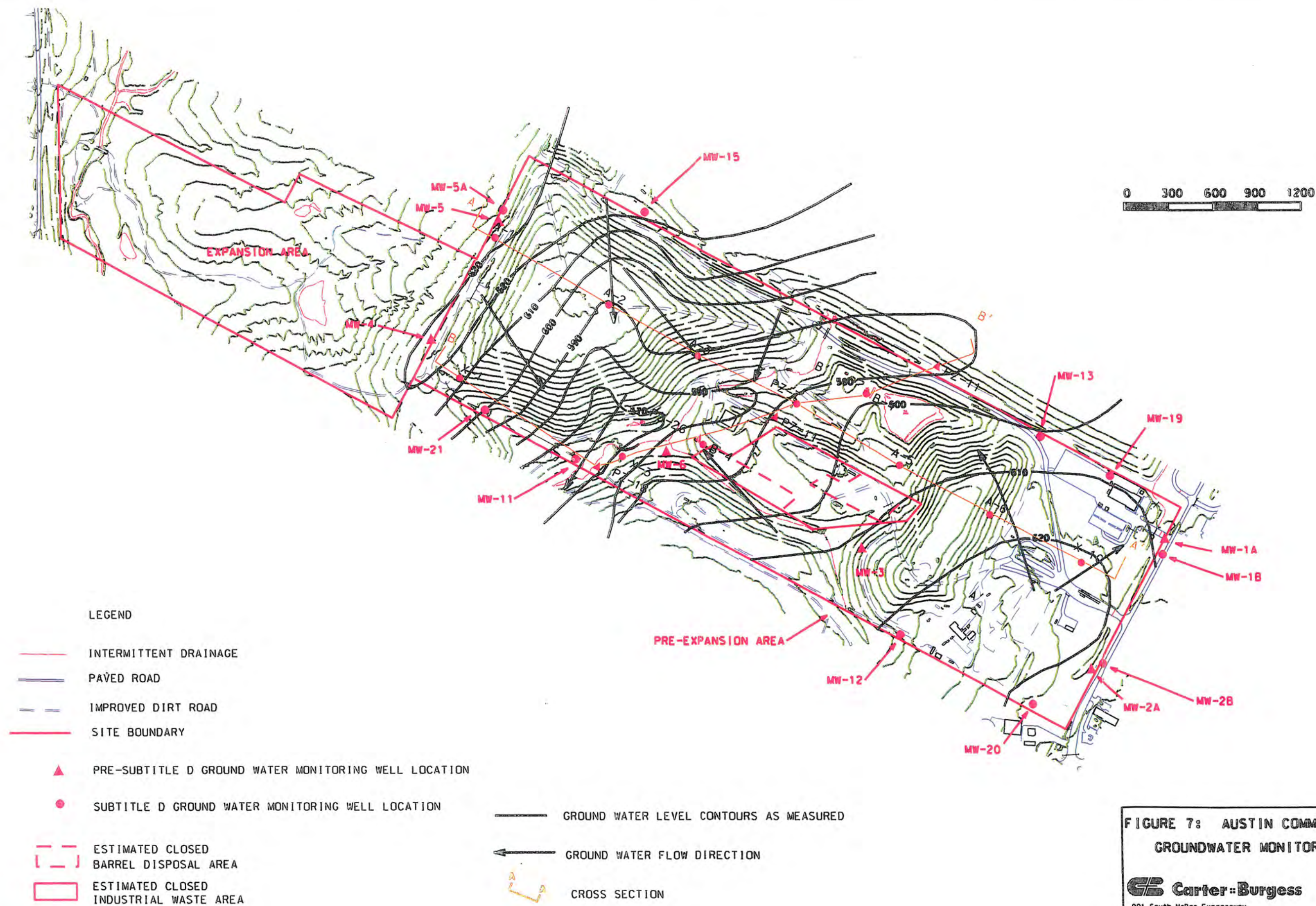
FIGURE 6: AUSTIN COMMUNITY LANDFILL
 LINER CONSTRUCTION TYPE

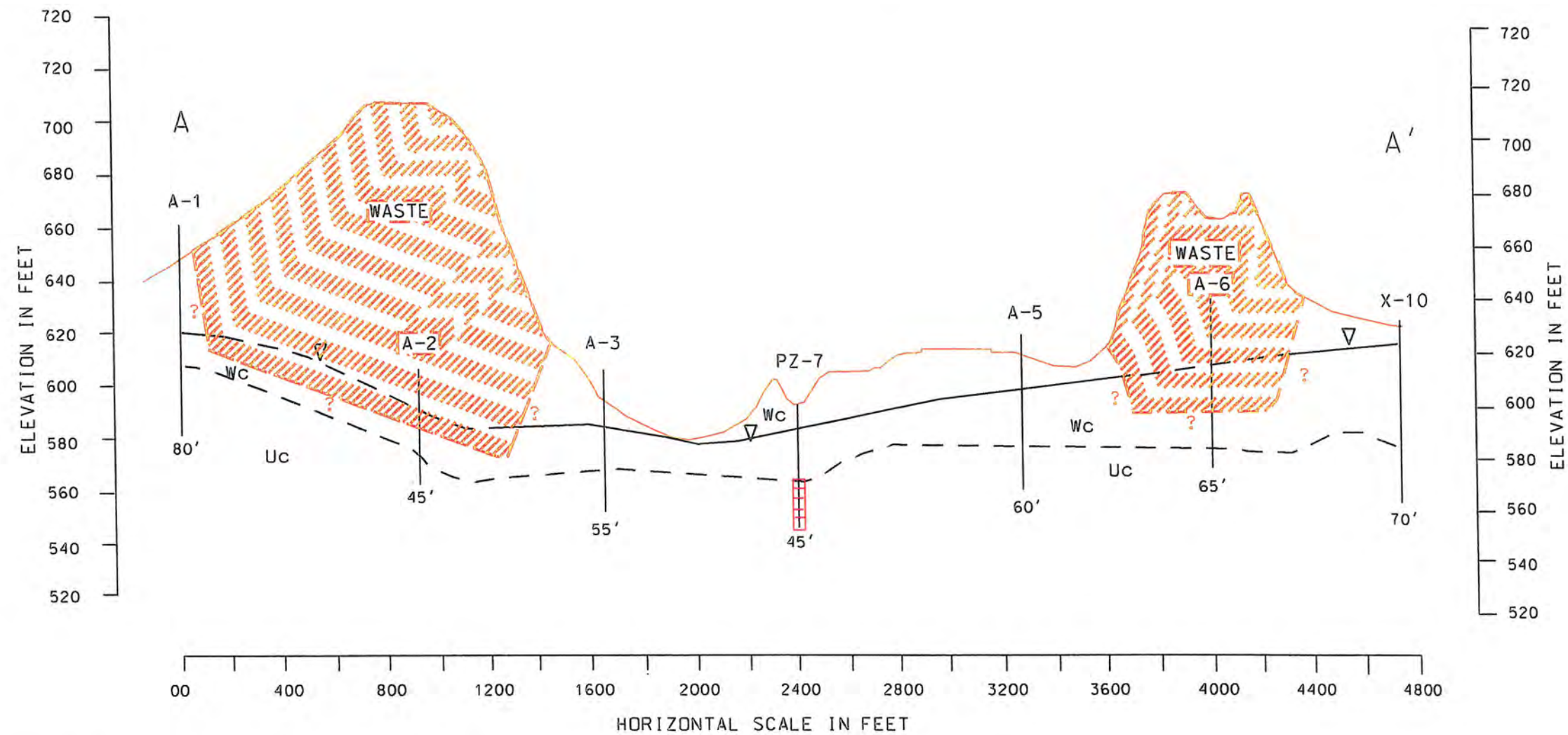
Carter-Burgess

901 South MoPac Expressway
 Barton Oaks Plaza V, Suite 200
 Austin, Texas 78746
 (512) 314-3100


SOURCE: PITTMAN ENGINEERING

Texas Disposal Systems





LEGEND

—  —

SITE BOUNDARY

GROUND WATER ELEVATION OBSERVATION (8/11/94)
GROUND WATER LEVEL DASHED WHERE ESTIMATED
BECAUSE OF LACK OF CONTROL POINTS, AND BECAUSE OF
INTERSECTION WITH WASTE UNIT BOUNDARY.

Wc WEATHERED CLAY
Uc UNWEATHERED CLAYSTONE

SCREENED INTERVAL

APPROXIMATE CONTACT BETWEEN WEATHERED AND UNWEATHERED CLAY (FROM RUST 1995)

APPROXIMATE EXTENT OF WASTE TAKEN FROM MCBRIDE-RATCLIFF AND ASSOCIATES INC. REPORT, 1992.

NOTES:

GEOLOGY TAKEN FROM RUST
E&I-HOUSTON CROSS SECTION AND FIGURE 5.

GROUND SURFACE ELEVATIONS
FROM AN AERO-METRIC 1992 SURFACE
TOPOGRAPHY MAP.

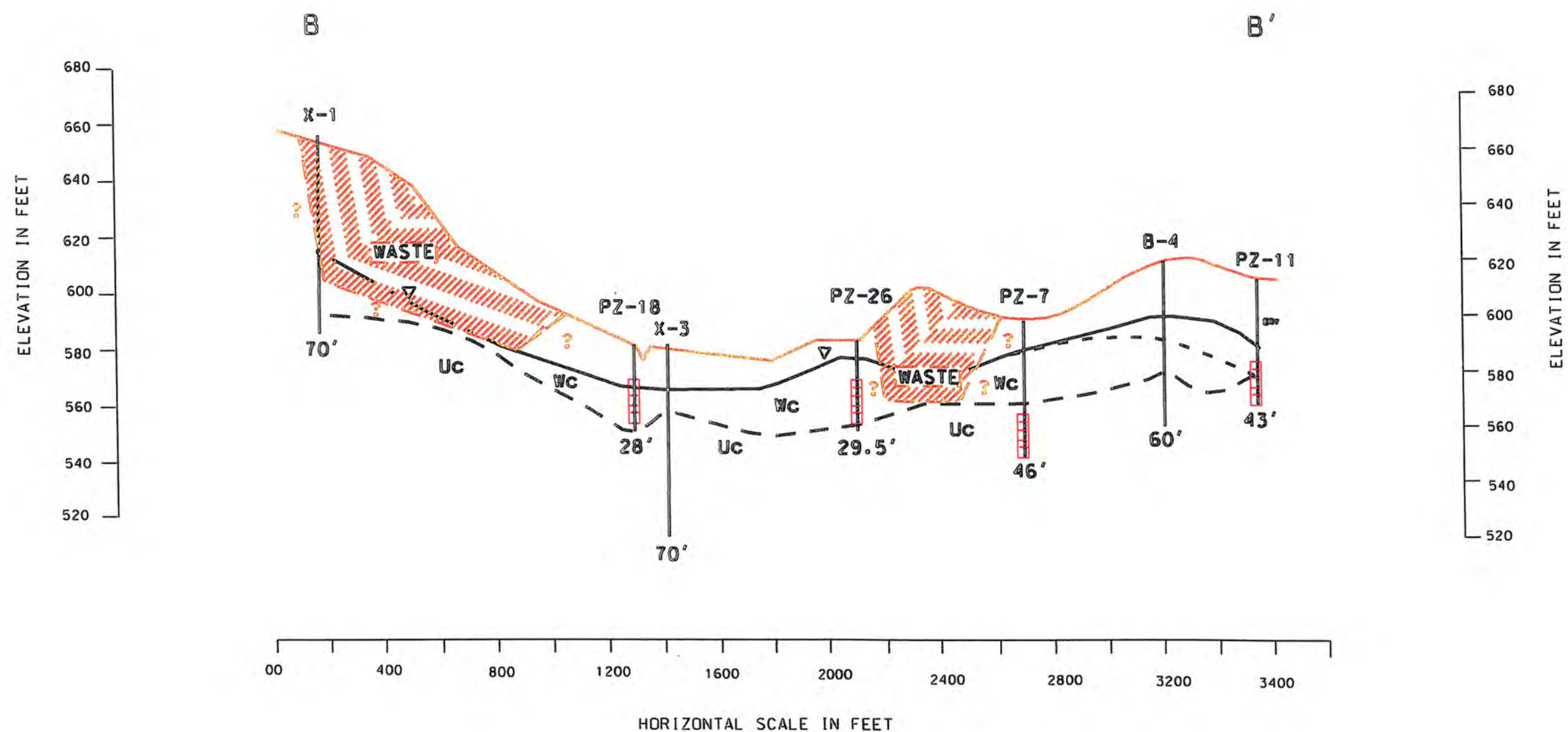
**FIGURE 8: AUSTIN COMMUNITY LANDFILL
CROSS SECTION A-A'**


Carter-Burgess

901 South MoPac Expressway
Barton Oaks Plaza V, Suite 200
Austin, Texas 78746
(512) 314-3100

SOURCE: NEW CONVENTION & INFRASTRUCTURE

Texas Disposal Systems



LEGEND

- SITE BOUNDARY
- GROUND WATER ELEVATION OBSERVATION (8/11/94)
GROUND WATER LEVEL DASHED WHERE ESTIMATED
BECAUSE OF LACK OF CONTROL POINTS, AND BECAUSE OF
INTERSECTION WITH WASTE UNIT BOUNDARY.
- Wc WEATHERED CLAY
- Uc UNWEATHERED CLAYSTONE
- SCREENED INTERVAL

- — — APPROXIMATE CONTACT BETWEEN
WEATHERED AND UNWEATHERED CLAY
(FROM RUST 1995)
- ? — ? APPROXIMATE EXTENT OF WASTE
TAKEN FROM MCBRIDE-RATCLIFF AND
ASSOCIATES INC. REPORT, 1992.

NOTES:

GEOLOGY TAKEN FROM RUST
E&I-HOUSTON CROSS SECTION AND FIGURE 5.

GROUND SURFACE ELEVATIONS
FROM AN AERO-METRIC 1992 SURFACE
TOPOGRAPHY MAP.

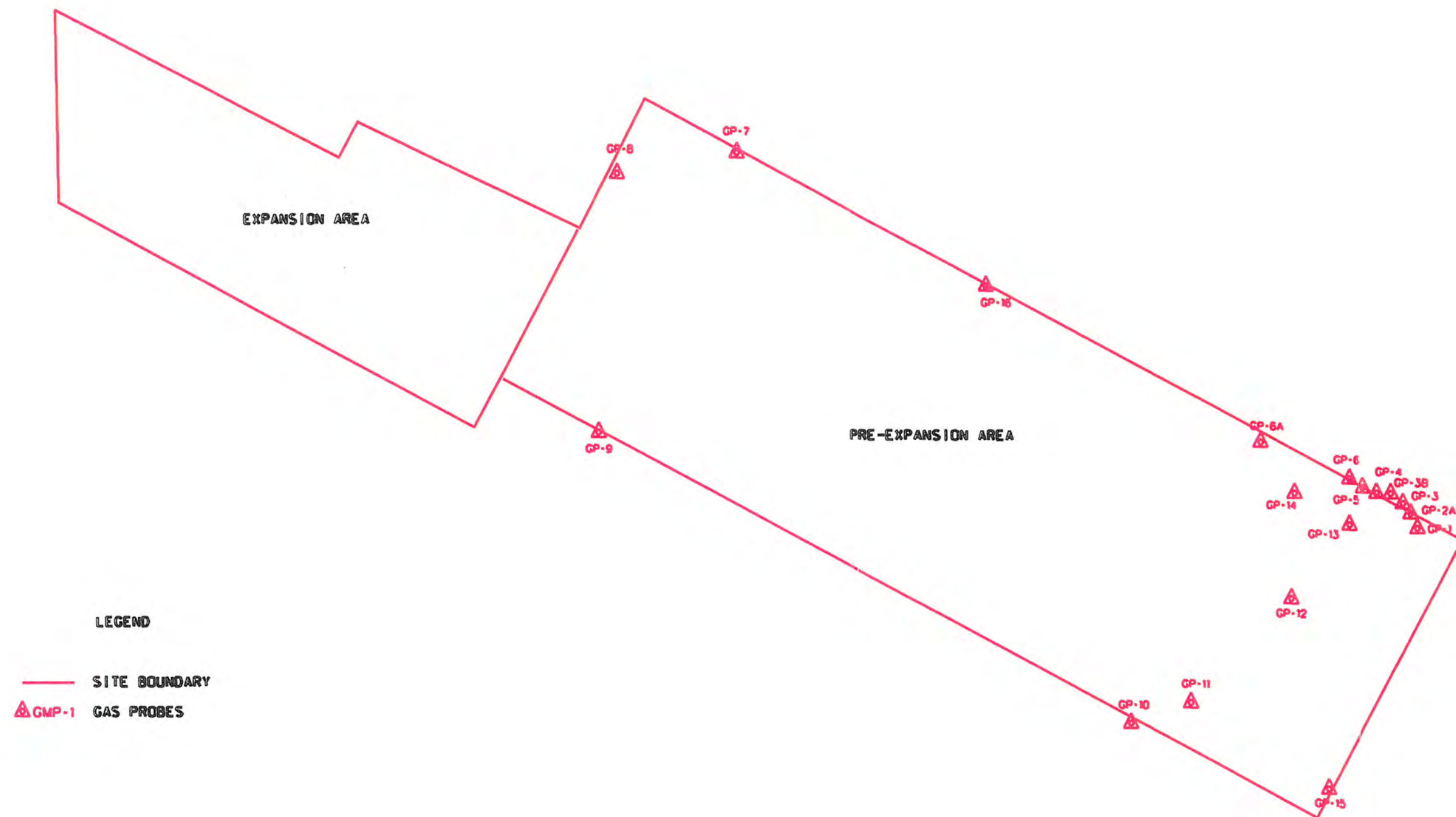
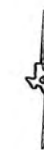
**FIGURE 9: AUSTIN COMMUNITY LANDFILL
CROSS SECTION B-B'**

Carter-Burgess

901 South MoPac Expressway
Barton Oaks Plaza V, Suite 200
Austin, Texas 78746
(512) 314-3100

SOURCE: RUST ENVIRONMENT & INFRASTRUCTURE

Texas Disposal Systems

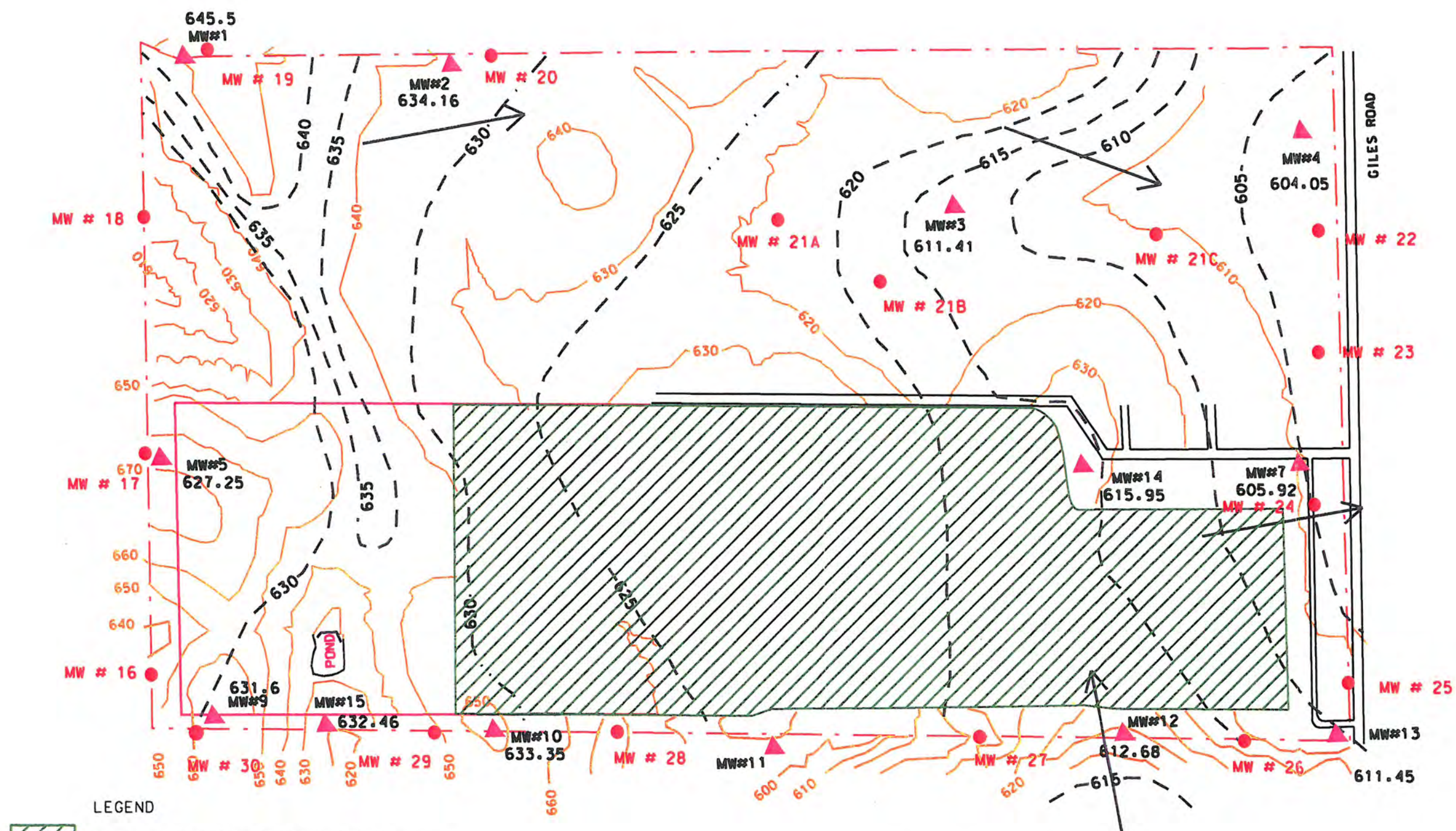


**FIGURE 10: AUSTIN COMMUNITY LANDFILL
GAS MONITORING PROBE LOCATIONS**

Carter-Burgess

901 South MoPac Expressway
Barton Oaks Plaza V. Suite 200
Austin, Texas 78746
(512) 314-3100

SOURCE: RUST ENVIRONMENT & INFRASTRUCTURE
Texas Disposal Systems



LEGEND

- APPROXIMATE EXTENT OF PRE-SUBTITLE D FILL
- PRE-SUBTITLE D GROUND WATER MONITOR WELL
- GROUND WATER ELEVATION (JULY 1997)
DASHED WHERE INFERRED
- SUBTITLE D GROUND WATER MONITOR WELL
- PRE-DEVELOPMENT CONTOUR
- GROUND WATER DIRECTION

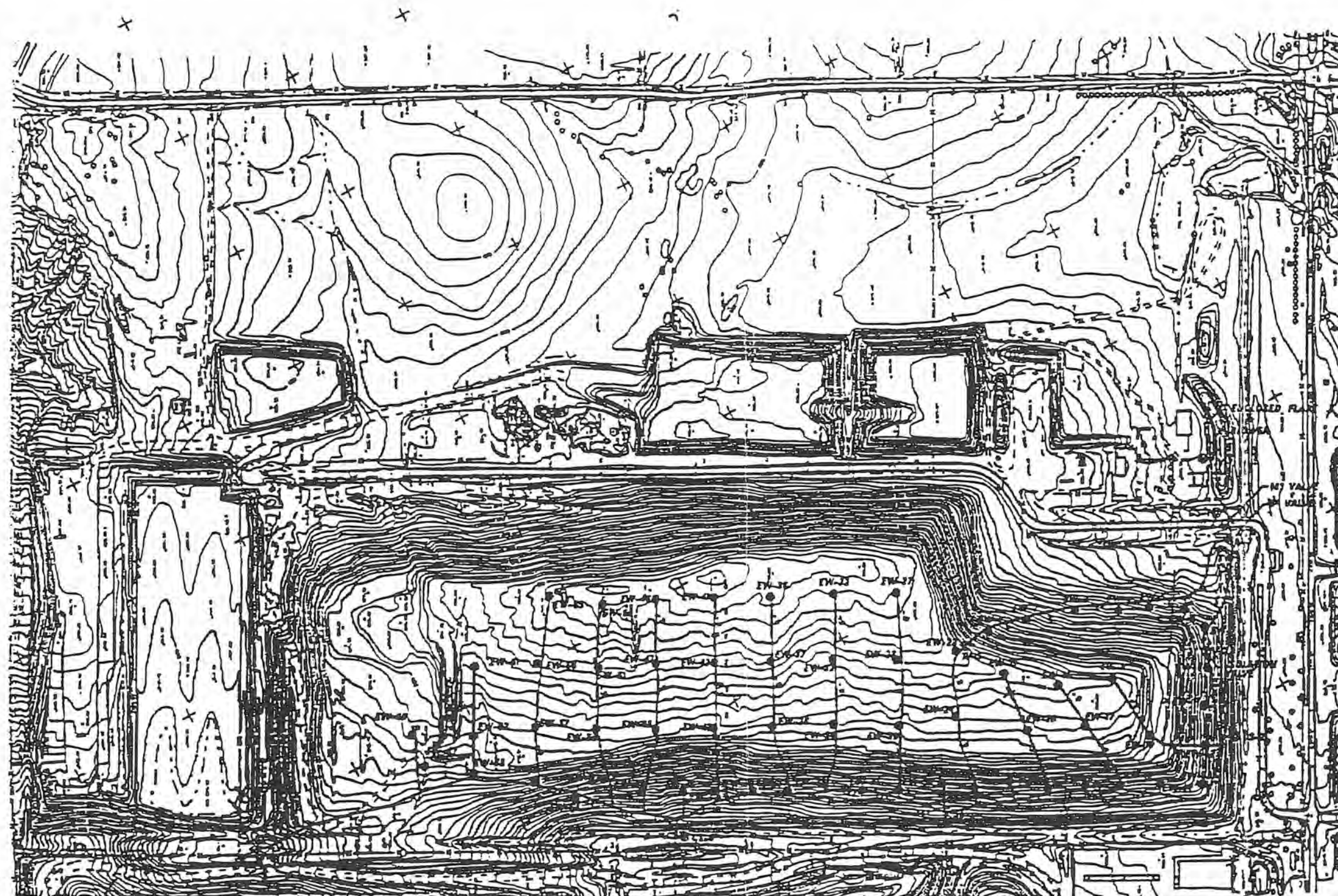
0 400 800
SCALE IN FT

SOURCE: SAM SURVEYING & MAPPING, RUST ENVIRONMENT & INFRASTRUCTURE

**FIGURE 11: BFI SUNSET FARMS LANDFILL
GROUNDWATER MONITORING SYSTEM**

Carter Burgess
901 South MoPac Expressway
Barton Oaks Plaza V. Suite 200
Austin, Texas 78746
(512) 314-3100

Texas Disposal Systems



——— GAS COLLECTION LINE
 EW-01 @ GAS WELL
 VAL @ VALVE
 CS-01 @ SLUMP
 FL @ FLANGE

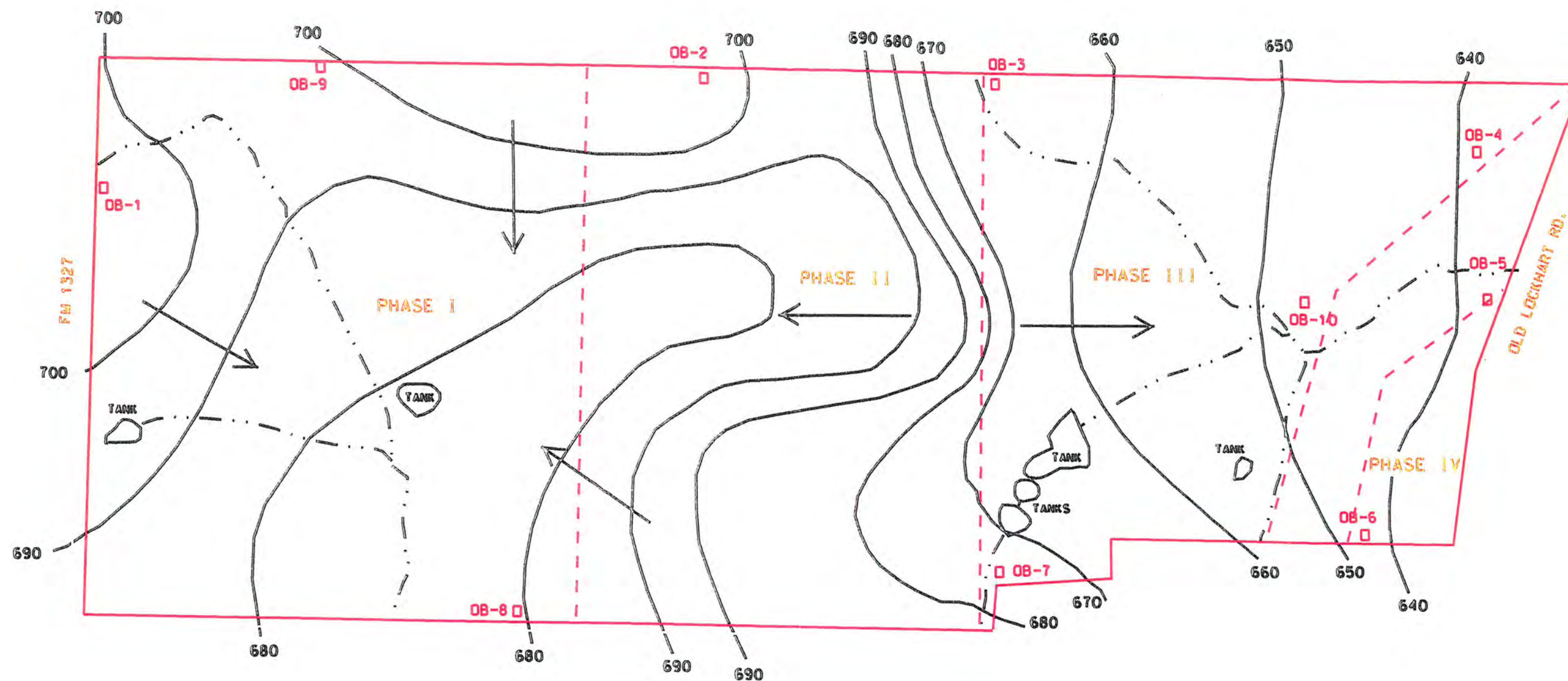
FIGURE 12: BFI LANDFILL GAS COLLECTION SYSTEM

Carter Burgess

901 South MoPac Expressway
 Barton Oaks Plaza V, Suite 200
 Austin, Texas 78746
 (512) 314-3100

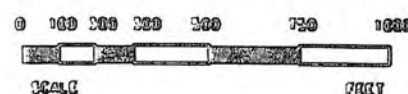
SOURCE: BFI

Texas Disposal Systems



LEGEND

- GROUNDWATER ELEVATIONS
- - - INTERMITTENT DRAINAGE
- OB-7 MONITOR WELL LOCATIONS
- GROUNDWATER FLOW DIRECTION



**FIGURE 13: TEXAS DISPOSAL SYSTEMS
LANDFILL**

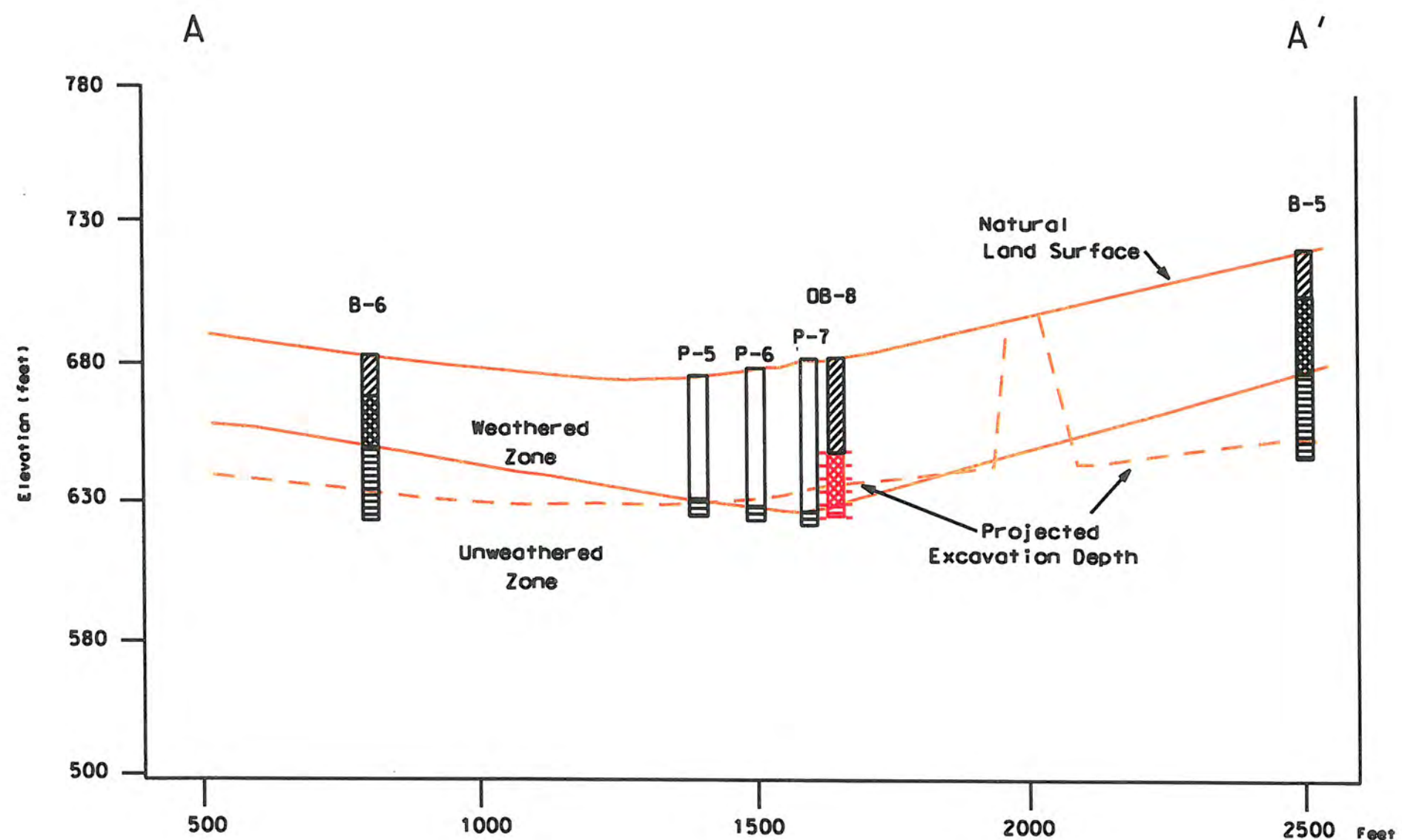
GROUNDWATER MONITORING SYSTEM

Carter-Burgess

901 South MoPac Expressway
Barton Oaks Plaza V. Suite 200
Austin, Texas 78746
(512) 314-3100

SOURCE: DIPPEL ULMAH
ROBERT S. BIER CONSULTING

Texas Disposal Systems

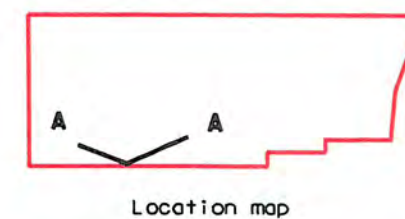


Legend

- Clay
- Weathered Shale
- Shale

P-5, P-6, P-7 borings logged only for shale content

Screened Interval



**FIGURE 15: TEXAS DISPOSAL
SYSTEMS LANDFILL
CROSS SECTION A-A'**

Carter Burgess

901 South MoPac Expressway
Barton Oaks Plaza V, Suite 200
Austin, Texas 78746
(512) 314-3100

SOURCE: NOT PROVIDED

Texas Disposal Systems

CITY OF AUSTIN
PRIVATE LANDFILL ENVIRONMENTAL ASSESSMENT
CIP PROJECT NO. 5040-150-3210
TRAVIS COUNTY, TEXAS

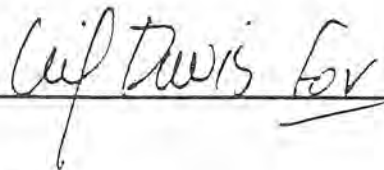
Prepared by:

CARTER & BURGESS, INC.
ENVIRONMENTAL SERVICES DIVISION
Barton Oaks Plaza V, Suite 200
901 South MoPac Expressway
Austin, Texas

Prepared for:

The City of Austin
Department of Public Works and Transportation
Architectural and Engineering Services
One Texas Center
505 Barton Springs Road
Austin, Texas 78704

CLYDE V. BAYS, Ph.D., P.E.
MANAGER OF ENVIRONMENTAL SERVICES
AND ASSOCIATE



CRAIG M. CARTER, P.G.
PROJECT MANAGER



C&B PROJECT NO. 98-3268-010

February, 1999

TABLES

Table 1
HISTORY OF SELECTED REGULATIONS OF SOLID WASTE IN TEXAS

DATE	REGULATION	CITATION	QUOTE OR COMMENT
1963	General	Article 696a, Annotated Penal Code of Texas, §2	Directed the TSDH to ⁴ promulgate rules and standards regulating the processing and treating of refuse, garbage, rubbish or junk dumped, deposited or left within 300 yards of any public highway in the state.
1964	Regulatory Authority	Rules and Standards Regulating the Disposal of Refuse, Garbage, Rubbish, or Junk, January 13, 1964, Section A.	"The State Department of Health shall promulgate rules and standards regulating the processing and treating of refuse, garbage, rubbish, or junk dumped, deposited, or left within or nearer than 300 yards of any public highway in this State."
1964	Regulation Required	Rules and Standards Regulating the Disposal of Refuse, Garbage, Rubbish, or Junk, January 13, 1964, Section B, Item 1.	"The facility for the processing and treatment of refuse, garbage, rubbish, or junk ... shall be planned for orderly development and operation. The municipal corporation, private corporation, firm, or person providing a facility shall, upon request, furnish satisfactory evidence to the Texas Department of Health that the facility is planned for orderly development and operation, that geological characteristics have been adequately investigated; and that adequate cover material that compacts well is available."
1964	Liner Requirements	Rules and Standards Regulating the Disposal of Refuse, Garbage, Rubbish, or Junk, January 13, 1964, Section B, Item 1.	"The municipal corporation, private corporation, firm, or person providing a facility ... shall, upon request, furnish satisfactory evidence to the Texas Department of Health that ... that geological characteristics have been adequately investigated."
1964	Closure	Rules and Standards Regulating the Disposal of Refuse, Garbage, Rubbish, or Junk, January 13, 1964, Section B, Item 8.	"A final cover of compacted suitable material shall be placed over the entire surface of each completed portion of the treatment area not later than one week following the placement of refuse within that portion."
1964	Post-Closure Care	Rules and Standards Regulating the Disposal of Refuse, Garbage, Rubbish, or Junk, January 13, 1964, Section B, Item 8.	"Arrangements shall be made for the repair of all cracked or eroded areas in the final cover during the year following final use of the site."

1970	Regulatory Authority	1. Municipal Solid Waste Rules, Standards, and Regulations, § A-5 (2).	1. "The Texas State Department of Health shares joint responsibility with the Texas Water Quality Board in the supervision of the Solid Waste Disposal Act. As stipulated in the law, the Health Department shall have jurisdiction over all solid waste activities concerned with municipal solid waste or with a combination of both municipal and industrial solid waste and shall consult with the Board when water quality matters are involved."
		2. Municipal Solid Waste Rules, Standards, and Regulations, § A-5 (3).	2. "The Texas State Department of Health shall consult with the Texas Air Control Board on aspects of solid waste management that relate to air pollution control and ambient air quality."
		3. Municipal Solid Waste Rules, Standards, and Regulations, § A-5 (3) - (7).	3. The landfill must also comply with any county government regulations, special districts regulations, municipal governments regulations, regional planning councils regulations.
1970	Regulation Required	Municipal Solid Waste Rules, Standards, and Regulations, § B-2.1.	A letter of application for approval from the Texas Department of Health is required in order to conduct Municipal Solid Waste Activities.
1970	Liner Requirements	Municipal Solid Waste Rules, Standards, and Regulations, § E-1.4 (c).	"Solid waste shall be deposited in such a manner that the possibility of leachate percolating into the groundwater is minimized. An impervious barrier may be either naturally occurring or artificially placed. The following procedures are acceptable:
			<ol style="list-style-type: none"> 1. Placement of three feet of clay. 2. Placement and compaction of one foot of selected clayey material under optimum moisture conditions. 3. Placement of an impervious membrane of asphaltic, plastic, or other approved material. 4. Any procedure other than 1, 2, or 3 above, if approved by the Texas State Department of Health."

1970	Groundwater Monitoring	Municipal Solid Waste Rules, Standards, and Regulations, § E-1.4 (f).	"If deemed necessary by the Department, monitor wells will be drilled by the operating agency in the configuration and number set by the Texas Water Quality Board to observe changes in the quality of groundwater."
1970	Closure	Municipal Solid Waste Rules, Standards, and Regulations, § E-3.1 (c)(3)(c).	In addition to the 1964 requirements: "The final cover shall be of a clay type or other earthen material of satisfactory quality. Each completed portion of the site shall be covered with at least two feet of well compacted material within a week."
1970	Post-Closure Care	Municipal Solid Waste Rules, Standards, and Regulations, § E-3.1 (c)(3)(f).	"It is recommended that the completed surface of the landfill be planted with vegetation to prevent erosion and enhance the appearance of the site."
1974	Regulation Required	Municipal Solid Waste Regulations, October 16, 1974, § C-1.	A site permit from the Department is required. The permit is issued only after a required public hearing. The landowners "immediately surrounding" the landfill site must be provided notice of the hearing.
1974	Liner Requirements	Municipal Solid Waste Rules, Standards, and Regulations, § E-1.3 (b).	"Solid waste shall be deposited in such a manner that the possibility of leachate percolating into the groundwater is minimized. An artificially placed restrictive barrier may be required in soils with unacceptable permeability."
1974	Closure	Municipal Solid Waste Rules, Standards, and Regulations, § E-2.8 (a).	"A final cover of at least two feet of well-compacted suitable material shall be placed over the entire surface of each completed portion of the treatment area."
1974	Post-Closure Care	1. Municipal Solid Waste Rules, Standards, and Regulations, § E-2.8 (a). 2. Municipal Solid Waste Rules, Standards, and Regulations, § E-2.8 (a).	1. "For a period of one year following closure of the site, the entire surface of the final cover shall be inspected monthly, and all cracked, eroded, and uneven areas shall be repaired and graded to drain." 2. "The Department may require that the completed surface of the landfill be planted with vegetation to prevent erosion and enhance the appearance of the site."

1975	Regulatory Authority	Municipal Solid Waste Regulations, July, 1975, Preamble.	Only change was that the Texas Department of Health changed its name to the Texas Department of Health Resources.
1976	Regulation Required	Municipal Solid Waste Management Regulations, January 2, 1976, § C-2.	Required public hearing. Notice published in newspaper but no particular individuals noticed individually.
1976	Liner Requirements	Municipal Solid Waste Management Regulations, January 2, 1976, § E-1.4 (a).	"Solid waste shall be deposited in such a manner that the possibility of leachate percolating into the groundwater is minimized. A minimum thickness of three feet of relatively impermeable soil ... must separate deposited solid waste from groundwater. These characteristics may be provided either by the natural soil or through a compacted liner of clay or other suitable material."
1977	Regulatory Authority	Municipal Solid Waste Management Regulations, April 20, 1977, § A-6.3 - 6.6.	Name changed back to Texas Department of Health, along with the addition of consultation with the following agencies: Texas Water Development Board (floodplains), State Department of Highways and Public Transportation (roads), U.S. Army Corps of Engineers (navigable waters and wetlands), and the Federal Aviation Administration (birds and aircraft).
1977	Regulation Required	Municipal Solid Waste Management Regulations, April 20, 1977, § E-2.8.	Notice of application required to be published. Rule states that "all citizens" have the right to be present and comment on the permit application. Administrative Procedure and Texas Register Act rules apply to hearing.
1977	Liner Requirements	Municipal Solid Waste Management Regulations, April 20, 1977, § E-2.8.	Added to the 1976 requirement were these requirements: "As an aid in determining the amount of protective lining necessary for disposal areas or trenches, or for eliminating the requirement for such lining, calculations should be submitted indicating the potential percolation of precipitation into deposited solid waste and potential for leachate generation using the water balance method based on rainfall, evapotranspiration, and soils data as developed by C.W. Thornthwaite of Drexel Institute of Technology and in use in the soil and water conservation field."

1977	Landfill Gas Monitoring	Municipal Solid Waste Management Regulations, April 20, 1977, § F-2.12.	"Decomposition gases shall not be allowed to migrate laterally from the landfill site to endanger occupants of adjacent properties. Any structures subsequently constructed on the landfill site should contain provisions for the venting of decomposition gases to preclude their accumulation in explosive or toxic concentrations beneath or within the structures."
1977	Closure	<p>1. Municipal Solid Waste Management Regulations, April 20, 1977, § F-2.13.</p> <p>2. Municipal Solid Waste Management Regulations, April 20, 1977, § F-2.15.</p>	<p>1. "A final cover of at least two feet of earthen material, compacted in layers of no more than 12 inches, shall be placed over the entire surface of each completed portion of the fill within 30 days after completion unless inclement weather would prevent the application of dry cover material. The top six inches of final cover shall consist of a suitable topsoil which will sustain the growth of vegetation."</p> <p>2. Site operator must provide closure plan 60 days prior to completion of disposal operations. Site operator must prepare an "Affidavit to the Public" and file it in the real property records of the county.</p>
1980	Regulatory Authority	Municipal Solid Waste Management Regulations, November 19, 1980, § A-6.1.	Only change was name of Texas Water Control Board became Texas Department of Water Resources.
1980	Liner Requirements	Municipal Solid Waste Management Regulations, November 19, 1980, § E-2.3e (4)(c).	This was the first time that a soil and liner quality control plan (SLQCP) was required to be a part of the permit application. Also provided for constructed lining other than compacted clay if written approval obtained from the Department during the design phase of the application.
1980	Leachate Collection	Municipal Solid Waste Management Regulations, November 19, 1980 § E, Paragraph 2.3e (6)(d).	"Handling and temporary storage of contaminated surface water shall be considered. If required, contaminated surface water storage areas shall be designed with regard to size, locations, and methods, and amounts of lining of the sides and bottoms of the storage areas."

1980	Groundwater Monitoring	Municipal Solid Waste Management Regulations, November 19, 1980, § E-2.3e (4)(d).	"The need for monitor wells shall be considered. If Departmental evaluation deems it necessary, monitor wells will be required. The Department may require that earth electrical resistivity surveys be used in lieu of or as a supplement to monitor wells."
1980	Landfill Gas Monitoring	Municipal Solid Waste Management Regulations, November 19, 1980, § E-2.3e (8).	"The potential for generation and migration of methane from the site shall be considered, and an appropriate venting system or other control measures shall be designed if necessary. If a determination is made that gas migration will not be a problem and a control plan is not necessary, the basis for such determination shall be provided. The design for control measures shall be in accordance with Departmental guidelines and included as an appendix to the Site Development Plan."
1980	Post-Closure Care	Municipal Solid Waste Management Regulations, November 19, 1980, § F-2.16 (g).	"For the first year after closure, the site operator shall periodically inspect his closed site and correct as necessary any problems associated with erosion, vegetative growth, leachate or methane migration, subsidence and ponding of water on the site. If any of these problems persist for longer than the first year, the site operator shall be responsible for their correction until the Department determines that the problem areas have been adequately resolved."
1983	Regulation Required	Municipal Solid Waste Management Regulations, July 12, 1983, § 325.93 (a)(1)-(2).	Public hearing no longer required. Any "person affected" has a right to request a hearing. Department may conduct a hearing on its own motion.

1983	Groundwater Monitoring	1. Municipal Solid Waste Management Regulations, July 12, 1983, § 325.74 (b)(5)(D)(vii).	1. Except as may be authorized by subclause (VIII) of this clause, groundwater monitor wells shall be installed for surface impoundments, landfills, and land treatment sites. A groundwater monitoring system will consist of at least one monitor well hydraulically upgradient of the site to obtain representative background groundwater samples and at least two monitor wells hydraulically downgradient of the site to obtain representative groundwater samples that may contain contaminants from leachate. The department may require additional monitor wells when conditions warrant, particularly for large sites. The design engineer shall determine the number, location, and depth of monitor wells based on such groundwater information as depth to the water table, direction and rate of groundwater flow, recharge area in relation to the site, static water elevation with dynamic head characteristics, and depth to the first potable aquifer."
		2. Municipal Solid Waste Management Regulations, July 12, 1983, § 325.74 (b)(5)(D)(vii)(VIII).	2. "All or part of the groundwater monitoring requirements may be waived by the department if it can be demonstrated that there is low potential for the creation and migration of leachate from the site via aquifers to water supply wells or to surface water. Potential for the creation and migration of leachate may be evaluated using the water balance of precipitation, evapotranspiration, runoff, and infiltration and the evaluation of the hydrogeological and physical properties characteristics of the saturated and unsaturated zone and the proximity of the site to water supply wells or surface water."
1983	Closure	Municipal Solid Waste Management Regulations, July 12, 1983, § 325.152 (a)-(b).	First year that application required to contain a closure plan for the site. Site operator must provide updated closure plan one year prior to closure of site. Other requirements above also apply.

1983	Post-Closure Care	1. Municipal Solid Waste Management Regulations, July 12, 1983, § 325.153.	1. "For at least the first five years after closure, the site operator shall maintain the right-of-entry and periodically inspect his closed site and correct as necessary any problems associated with erosion of cover material, vegetative growth, leachate or methane migration, subsidence and ponding of water on the site. If any of these problems persist for longer than the first five years, the site operator shall be responsible for their correction until the Department determines that the problem areas have been adequately resolved."
1990	Leachate Collection	2. Municipal Solid Waste Management Regulations, July 12, 1983, § 325.154 (a)-(b).	2. Municipal Solid Waste Management Regulations, July 12, 1983, § 325.154 (a)-(b). This is also the first year that the Department retained regulatory control over any activity which could disturb the integrity of the closed landfill.
		1. Municipal Solid Waste Management Regulations, August 7, 1990, § 325.123 (d).	1. "Suitable drainage structures shall be provided to divert the flow of rainfall runoff or other surface water away from active disposal areas and to contain any water that has come in contact with solid waste."
		2. Municipal Solid Waste Management Regulations, August 7, 1990, § 325.123 (e).	2. "Rainfall water within the landfill area that has come in contact with solid waste and other polluted waters shall not be discharged without prior specific approval of Texas Department of Water Resources."

1990	Landfill Gas Monitoring	Municipal Solid Waste Management Regulations, August 7, 1990, § 325.148.	Methane and other decomposition gases shall not be allowed to migrate laterally from the landfill site so as to endanger structures, vegetation, or occupants of adjacent properties. Any structures subsequently constructed on the landfill site should contain provisions for the venting of decomposition gases to preclude their accumulation in explosive or toxic concentrations beneath or within the structures. The concentration of methane generated by the solid waste site should not exceed 25% of its lower explosive limit in on-site structures (excluding gas control or recovery system components) and it shall not exceed its lower explosive limit at the property boundary. The lower explosive limit is the lowest percent by volume of a mixture of methane which will propagate a flame in air at or above 25° C and atmospheric pressure.
1990	Post-Closure Care	<p>1. Municipal Solid Waste Management Regulations, August 7, 1990, § 325.153 (b).</p> <p>2. Municipal Solid Waste Management Regulations, August 7, 1990, § 325.154.</p>	<p>In addition to all of the above requirements of 1983 is the following:</p> <p>1. "Any monitoring programs (groundwater monitoring, resistivity studies, methane monitoring, etc.) in effect during the life of the site shall be continued during the post-closure maintenance period, unless otherwise approved by the department."</p> <p>2. The Department retained regulatory control over specific activities that may take place on a closed landfill: relocating waste from a closed landfill, extracting materials for energy, or material and gas recovery. The Department also gave guidance for other activities.</p>
10/9/91	General	Amendments to 40 CFR Part 257 and new 40 CFR Part 258	As a result of new requirements in Subtitle D of RCRA as amended by the Hazardous and Solid Waste Amendments (HSWA), USEPA excluded municipal solid waste landfills from Part 257 and established revised and more stringent MSWLF criteria in Part 258 (commonly referred to as the Subtitle D criteria).

1991	General	Amendments to the Texas Solid Waste Disposal Act (Senate Bill 2, 72 nd Legislature, Regular Session	Transferred the municipal solid waste program from the Texas Department of Health to the Texas Water Commission effective March 1, 1992, and created the Texas Natural Resource Conservation Commission effective September 1, 1993, incorporating the Texas Air Control Board.
1993	General	30 TAC, Chapter 330, MSW (formerly, municipal solid waste rules were found at 25 TAC, Chapter 325).	Revision to the municipal solid waste regulations for consistency with the federal municipal solid waste program and to reflect transfer in jurisdiction from the TDH to TWC/TNRCC.
1994	Liner Requirements	30 TAC 330 §§ 205-206.	The current technical requirements for liners is largely the same since the inaction of Subtitle 'D' of the Resource Conservation and Recovery Act (RCRA). The requirements are set forth today in 30 TAC 330 §§ 205-206.
1994	Leachate Collection	1. 30 TAC § 330.55 (b)(3).	1. "The owner or operator shall design, construct, and maintain a run-off management system from the active portion of the landfill to collect and control at least the water volume resulting from a 24-hour, 25-year storm. The run-off from the active portion shall be discharged in compliance with paragraph (1) of this subsection or disposed of in an authorized manner."
		2. 30 TAC § 330.55 (b)(6).	2. "The owner or operator shall handle, store, treat, and dispose of surface or groundwater that has become contaminated by contact with the working face of the landfill or with leachate in accordance with § 330.139 of this title (relating to Contaminated Water Discharge). Storage areas for this contaminated water shall be designed with regard to size (verifying calculations included), treatment (supporting documentation and calculations included), locations, and methods and shall have an approved liner covering the bottom and side slopes. Other surface run-off water shall be handled in accordance with paragraph (3) of this subsection.
1994	Landfill Gas Monitoring	30 TAC § 330.56 (n) 30 TAC § 330.130	In addition to the 1990 requirements above, a Landfill Gas Management Plan (LGMP) is required to be a part of the application.

1994	Closure	30 TAC § 330.253	In addition to adherence to a closure plan, the TNRCC now requires that the site operator give public notice of closure and that signs be posted denoting the boundaries of the landfill site.
1994	Post-Closure Care	1. 30 TAC § 330.254	1. The post-closure maintenance period is now 30 years. The site operator is required to operate the groundwater and gas monitoring systems for the duration of the period.
		2. 30 TAC § 330.255	2. Post closure construction is more strictly regulated. Gas sensors must be installed in any structure on the site and no part of the construction can jeopardize the integrity of the liner.
		3. 30 TAC § 330.280-286	3. Finally, financial assurance for operation of the landfill, for closure, for post-closure maintenance, and for environmental contamination are required to be posted by the site owner.

TABLE 2
TABULATION OF SOIL AND LINER EVALUATION REPORTS
AUSTIN COMMUNITY LANDFILL

183 / 305

Log Unit of Cell Class	LAB TESTING				FIELD TESTING		Lift Thickness/ Method of Determination	FREQUENCY OF TESTS PER LIFT	PROTECTIVE COVER OVER LINER	ENGINEERS SEAL/DATE	REGULATORY CONCURRENCE DOCUMENTED
	Dry Density Proctor/ Moisture Content	Gradations (% passing No 200 Sieve)	Liquid Limit/Plasticity Index	Hydraulic Conductivity	Std. Proc. Density/Moisture Content	# Visits by Certifying Engineer					
	105-106/18 7-26 7	96-99	64-72 40-46	10(-8)		4				10/16/81	Yes
	98-106/18 7-1 29 4	96-99	58-72 31-46	10(-8) - 10(-9)		4				10/16/84	Yes
	724 8-1 26 2	84 3-86 4	58 3-58 7 33 9-34 5	4 5x10(-8)		2	8"			8/3/82	Yes
	98 3-105 4/23 3-26 3	84 3-96 9	59-63 33 5-45	10(-8) - 10(-9)		2				8/3/82	Yes
	100 8/24 6	84 3	58 3-24 2	3 2 x 10(-9)		2	8"			8/3/82	Yes
	98 3-99 2/23 3-26 3	91 8-96 9	59-64 18 2-25 5	6 1 x 10(-9)		2				8/3/82	Yes
	98 9-105 8/14 8-19 1	89 6-91 4	57 1-58 5/34 5-36 9			3	8"			9/8/82	Yes
	94 3-102/16 4-21 6	89 6-93 6	68 2-81 6/42 2-53 7			3				9/8/82	Yes
	91 5-105 8/14 8-27 7	89 6-92 2	57 1-79 3/34 5-51 6		96 6-103 6(6)	2	8"			1/4/83	Yes
	91 5-99 25/	90 8-93 2	62 3-79 3/38-51 6		96 8-98(6)	2				1/4/83	Yes
	97 6-107 8/	90 6-98 7	54 6-74 0/32 9-49 7			5				8/18/83	Yes
	98 4-101 6/	89 4-96 4	57-71 8/33 7-39 1			5				8/18/83	Yes
		89 8	60-33 9			4				6/15/84	Yes
		89 1	58 9/33 6			4				6/15/84	Yes
		96 3	56/35			3				9/28/84	Yes
		92 8-95 6	57-67/35-43			3				8/28/84	Yes
	104 3/20 3	87 6-90 6	65/38-41		ASTMD1557 (52)	19	8"	2-3		4/25/85	Yes
	95 5/25 7	87 6-90 6	49-53/27-29		ASTM D1557	19	8"	4-6		4/25/85	Yes
		88 5-91 3	62-73 5/33 7/43 3			10				8/2/85	Yes
		91 7	71 5/45 7			15				9/13/85	Yes
		79 3-92 2	64-68 7/38 9-43 4			15				9/13/85	Yes

TABLE 2
TABULATION OF SOIL AND LINER EVALUATION R. TS
AUSTIN COMMUNITY LANDFILL

184 / 305

c. Unit of Class	LAB TESTING				FIELD TESTING		Lift Thickness/ Method of Determination	FREQUENCY OF TESTS PER LIFT	PROTECTIVE COVER OVER LINER	ENGINEERS SEAL/DATE	REGULATORY CONCURRENCE DOCUMENTED
	Dry Density Proctor/ Moisture Content	Gradations (% passing No 200 Sieve)	Liquid Limit/Plasticity Index	Hydraulic Conductivity	Std. Proc Density/Moisture Content	# Visits by Certifying Engineer					
		86 6-90 2	82-74/33-42			6				10/25/85	Yes
		86 4-90 6	58-74 8/33-46			6				10/25/85	Yes
						1		3		11/22/85	Yes
						1		3		12/3/85	Yes
						1		3		12/5/85	Yes
					ASTMD1557(12 tot)	4		3		12/6/85	Yes
	Same source as 1-3-85 data		64-65/36-41								
		87 6-90 6	49-53/27-29			6 8"		3		1/21/86	Yes
					ASTMD1557 (9 tot)	6 8"		3	1'	1/21/86	Yes
		78 4-80 9	56-77/31-46			4				2/25/86	Yes
						10 8"		3		3/3/86	Yes
			90 9 73/44		ASTMD 1557 (19 tot)	10 8"		3	1'	3/3/86	Yes
		77 4-80 2	59-82/33-47			10				4/29/86	Yes
	100 2-101 9/20 3-22 2	71 5-90 9	60-73/33-44		ASTMD 1557 (9 tot)	10	6"-surveyed	4-6		5/12/86	Yes
	99 7-103 8/19 4-70 3	71 5-90 9	60-73/33-44		ASTMD 1557 (30 tot)	10	6"-12" -surveyed	6	1 1/2	5/12/86	Yes
	100 2-103 8/19 4-20 3	71 5-74 6	60-66/33-40		ASTMD 1557(6 tot)	8		3		7/2/86	Yes
	100 2-103 8/19 4-20 3	71 5-74 6	60-66/33-40		ASTMD 1557 (6 tot)	8		3	1'	7/2/86	Yes

TABLE 2
TABULATION OF SOIL AND LINER EVALUATION REPORTS
AUSTIN COMMUNITY LANDFILL

185 / 305

Typical Unit of Class	LAB TESTING				FIELD TESTING		Lift Thickness/ Method of Determination	FREQUENCY OF TESTS PER LIFT	PROTECTIVE COVER OVER LINER	ENGINEER'S SEAL/DATE	REGULATORY CONCURRENCE DOCUMENTED
	Dry Density Proctor/ Moisture Content	Gradations (% passing No 200 Sieve)	Liquid Limit/Plasticity Index	Hydraulic Conductivity	Std. Proc. Density/Moisture Content	# Visits by Certifying Engineer					
104 1/19 3	81.6	66/43			ASTMD 1557 (25 tot)	8	8"-12"-surveyed	6-7		9/16/86	Yes
ASTMD 698	81.6	66/43			ASTMD 1557 (25 tot)	8	8"-12"-surveyed	6-7	1'	9/16/86	Yes
104 3/19 4	91.7-92.6	61-63/39-41			ASTMD 1557 (33 tot)	11	8"-9"-surveyed	3		2/6/87	Yes
102 7/20 7	91.7-92.6	61-63/39-41			ASTMD 1557 (26 tot)	11	6"-12"-surveyed	6-8	1'	2/6/87	Yes
101 8-103 5/17 6-19 6	93.2-94.7	50-52/32-35			ASTMD 1557 (28 tot)	8	6"-surveyed	6-10	1'	5/5/87	Yes
103 0/17 3	74.6-83.9	56-59/33-35			ASTMD 1557 (15 tot)	8	8"-9"-surveyed	3		9/22/86	Yes
	78.7-90.9	56-58/35-47				8				9/22/86	Yes
102 1/20 1	90.5-93.0	62-64/41-42			ASTMD 1557 (9 tot)	6	6"-8"-surveyed	3		10/14/87	Yes
102 1/20 1	95.2	59/36			ASTMD 1557 (39 tot)	6	6"-8"-surveyed	8-14	1'	10/14/87	Yes
102 1/20 1	90.5-93.0	62-64/41-42			ASTMD 1557 (39 tot)	9	6"-8"-surveyed	3		10/26/87	Yes
102 1/20 1	95.2	59/36			ASTMD 1557 (45 tot)	9	6"-8"-surveyed	5-10	1'	10/26/87	Yes
103 4/19 8	88.4-94.3	61/37-41			ASTMD 1557 (79 tot)	11	6"-8"-surveyed	5-7		1/14/88	Yes
	90.0-95.9	61-71/47-49				11				1/14/88	Yes
97 8-100 5/18 9-22 4	93.2-96.7	63-72/36-46			ASTMD 1557 (86 tot)	18	8"-9"-surveyed	7-8		4/14/88	Yes
	88.4-97.7	61-67/37-46				18				4/14/88	Yes
100 9-104 5/18 6-20 3	91.2-97.7	57-69/32-43			ASTMD 1557 (44 tot)	16	8"-9"-surveyed	3		9/6/88	Yes
100 9-104 5/18 6-20 3	91.2-97.7	57-69/32-43			ASTMD 1557 (37 tot)	16	6"-7"-surveyed	3-6	1'	9/6/88	Yes
99 2-99 6/20 7-22 7	94.2-98.8	61-69/37-44			ASTMD 1557 (90 tot)	16	8"-9"-surveyed	3-5		6/1/90	Yes
	94.2-98.8	61-69/37-44				16				6/1/90	Yes
	97.3-97.5	63-71/37-39				2				11/8/90	Yes
	97.3-97.5	63-71/37-39				2				11/8/90	Yes

TABLE 2
TABULATION OF SOIL AND LINER EVALUATION REPORTS
AUSTIN COMMUNITY LANDFILL

Logic Unit of Soil Class	LAB TESTING				FIELD TESTING		Lift Thickness/ Method of Determination	FREQUENCY OF TESTS PER LIFT	PROTECTIVE COVER OVER LINER	ENGINEERS SEAL/DATE	REGULATORY CONCURRENCE DOCUMENTED
	Dry Density Proctor/ Moisture Content	Gradations (% passing No 200 Sieve)	Liquid Limit/Plasticity Index	Hydraulic Conductivity	Std. Proc. Density/Moisture Content	# Visits by Certifying Engineer					
				10(-8) - 10(-9)				8	1'	6/28/91	Yes
				10(-8) - 10(-9)						6/28/91	Yes
	ASTMD 698 (73 tot)	ASTMD 422 (15 tot)	ASTMD 4318 (15 tot)	10(-8)-10(-9)(15 tot)	ASTMD 1557 (73 tot)	22	6"-9"-surveyed	3-9	1'	6/4/91	Yes
	ASTMD 698 (81 tot)	ASTMD 422 (8 tot)	ASTMD 4318 (8 tot)	10(-8) - 10(-9)(8 tot)	ASTMD 1557 (81 tot)	17	6"-12"-surveyed	4-21	6" Constructed	12/12/91	Yes
										8/10/92	Yes
	ASTMD 698 (179 tot)	ASTMD 422 (25 tot)	ASTMD 4318 (25 tot)	10(-8) - 10(-9) (25 tot)	ASTMD 1557 (179 tot)	34	6"-9"-surveyed	9-14	1'	9/17/92	Yes
		ASTMD 422 (48 tot)	ASTMD 4318 (45 tot)	10(-8) (48 tot)		8				9/18/92	Yes
		ASTMD 422 (15 tot)	ASTMD 4318 (15 tot)	10(-8) - 10(-9) (15 tot)	ASTMD 1557 (47 tot)	24	6"-9"-surveyed		1'	10/27/92	Yes
	ASTMD 698 (289 tot)	ASTMD 422 (33 tot)	ASTMD 4318 (33 tot)	10(-8) - 10(-9) (33 tot)	ASTMD 1557 (289 tot)	38	6"-9"-surveyed	3-14	1'	11/19/92	Yes
		96 7 67/43		10(-8) (1 tot)	ASTMD 1557 (21 tot)	6				11/19/92	Yes
		94 3-98 8(45)		10(-8)-10(-9) (45 tot)	ASTMD 1557 (46 tot)	13			Re-Certification	7/21/93	Yes
	ASTMD 698 (85 tot)	ASTMD 422 (14 tot)		10(-8) (14 tot)	ASTMD 1557 (85 tot)	18	6"	3-8	1'	8/19/93	Yes

Texas Disposal Systems

TABLE 2
TABULATION OF SOIL AND LINER EVALUATION REPORTS
AUSTIN COMMUNITY LANDFILL

187 / 305

Logic Unit of Soil Class.	LAB TESTING				FIELD TESTING		Lift Thickness/ Method of Determination	FREQUENCY OF TESTS PER LIFT	PROTECTIVE COVER OVER LINER	ENGINEERS SEAL/DATE	REGULATORY CONCURRENCE DOCUMENTED
	Dry Density Proctor/ Moisture Content	Gradations (% passing No. 200 Sieve)	Liquid Limit/Plasticity Index	Hydraulic Conductivity	Std. Proc. Density/Moisture Content	# Visits by Certifying Engineer					
	ASTMD 698 (4 tot)	86 5-96 7		10(-8) (2 tot)	ASTMD 1557 (4 tot)	4			1"	9/7/93	Yes
	ASTMD 698 (11 tot)	96 7			ASTMD 1557 (11 tot)	4				9/7/93	Yes
	ASTMD 698	ASTMD 422	ASTMD 4318	ASTMD 5084	ASTMD 1557 (106 tot)	PE=12/Tech=Fulltime	6"	2-8		9/16/94	Yes
				Geosynthetic Clay Liner ASTMD 5084		PE=7/Tech=Fulltime				GCLER 12-28-95	Yes
										GCLER 12-28-95	Yes
										GCLER 9-29-97	Yes
						PE=13/Tech=Fulltime					
										8/21/98	Yes
		ASTMD 422 (27 tot)	ASTMD 4318 (26 tot)	ASTMD 5084 (26 tot)	ASTMD 1557 (658 tot)	PE=9/Tech=Fulltime	8"			8/21/98	Yes

188 / 305

2/16/99; 7:17 AM
Texas Disposal Systems

Table 3
Austin Community Landfill
Summary of Landfill Inspections
1991-1998

Inspection Date	Purpose of Inspection	County	Inspection Type	Inspection Results	Action
8/9/91	Routine	Travis	Announced	The site was in compliance.	General compliance letter sent by TNRCC 8/14/91.
10/17/91	Routine	Travis		The site was in compliance.	General compliance letter sent by TNRCC 10/23/91.
7/2/92	Routine	Travis	Unannounced	The site was in compliance.	General compliance letter sent by TNRCC 7/7/92.
10/20/92	Routine	Travis	Unannounced	Violation: 330.136(b), Special Wastes From Health Care Facilities, found uncovered medical waste.	Letter sent to ACL by TNRCC 10/26/92. corrective action by ACL due 11/25/92.
1/27/93	Routine	Travis		The site was in compliance.	General compliance letter sent by TNRCC 2/4/93.
5/3/93	Routine	Travis		Violations: 330.150(b) Intermediate Cover S.2, cover not adequate in area DIV-2, 330.150(d) Upgradient Poned Water S.8, areas which would allow for upgradient ponded water were observed.	Enforcement letter sent to ACL noting violations by TNRCC 5/13/93. Corrective actions to be implemented by ACL by 6/30/93.
11/15/93	Routine	Travis		The site was in compliance.	General compliance letter sent by TNRCC 12/3/93.
1/25/94	Routine	Travis		The site was in compliance.	General compliance letter sent by TNRCC 2/4/94.
7/4/94	Routine	Travis		The site was in compliance.	General compliance letter sent by TNRCC 7/7/94.
8/17/94	Routine	Travis		Violations: 330.133 (a,d) Daily cover was not adequate, 330.133(f) Erosion of cover.	Letter sent to ACL noting violations by TNRCC 9/19/98. Corrective actions to be implemented by 11/18/94.
2/20/95	Routine	Travis		Violation: 330.133(a,d) Daily cover was not adequate.	Letter sent to ACL noting violation by TNRCC 4/24/95. Corrective actions to be implemented by 5/24/95.
5/17/95	Routine	Travis		Violations: 330.120 Control of Wind Blown Waste and Litter, 330.133 (a,d) Daily Cover, 330.133(b) Intermediate Cover, 330.133(f) Erosion of Cover	Enforcement letter sent to ACL and Enforcement Personnel to resolve these violations. ACL to maintain and repair the final cover of area as necessary 6/16/95.
7/26/95	Routine	Travis		The site was in compliance.	General compliance letter sent by TNRCC 8/16/95.

Inspection	Purpose of Inspection	County	Inspection Type	Inspection Results	Action
11/29/95	Routine	Travis		Violations: 330.133(a,d) Daily Cover, 330.133(b) Intermediate Cover.	Letter sent to ACL to resolve violations, corrective action is to cover inactive areas and all waste must be covered at least once each 24 hour period of operation, to be implemented by 1/12/96.
5/7/97	Routine	Travis	Announced	Violation: 330.133(b) Intermediate Cover, erosion of the intermediate cover.	Letter sent to ACL and corrective action taken by ACL 5/21/97.
12/18/97	Routine	Travis		Violations: 330.114, Site Operating Plan, SOP, 1.2-Personnel, no personnel on site, 330.114 Site Operating Plan, SOP, 1.27 Special Waste, use of unapproved materials, 330.117(a) Internal Control, to attendant present to monitor unloading of waste, 330.130, Landfill Gas, over level.	Letter sent to ACL noting violations, submittal of compliance plan and schedule required to TNRCC by 2/2/1998.
11/24/98	Routine	Travis	Announced	Violation: 330.133(e) Final Cover, not completed, deep erosion was noted, waste exposed.	ACL was given 14 days to resolve violations during the exit interview, on 12/9/98 a schedule for final cover was received from ACL.

Seventeen (17) inspections have been conducted at the ACL Landfill during the last seven (7) years. Of the seventeen (17) inspections violations were noted during nine (9) of the inspections. All violations have been addressed.

Table 4
Austin Community Landfill
Summary of Complaints
1993-1998

Date	Complaint Number	County	Complaint Type	Notes	Action
5/12/95	119500578	Travis	Compliance	Landfill is alleged to be pumping leachate into a creek. Also, they are mixing human waste with fly ash and putting it into the landfill.	Site visit by TNRCC Inspector, site appeared to be in full compliance. Resolved 6/09/95
11/24/98	119900090	Travis	Compliance	Erosion and exposed waste on south side of west hill.	Site visit by TNRCC Inspector, site had been repaired. Resolved 12/7/98

Two (2) complaints have been filed against Austin Community Landfill. during the last five (5) years.
All complaints have been resolved.

Table 5
Landfill Volume Estimates

Landfill	Tons/ day (1)	1997 tons	Used Volume (c.y.)	Remaining Volume (c.y.)	Remaining Tons	Remaining Years
ACL	1,417	425,012	13,467,500	14,097,500	10,573,125	24.90
BFI	1,777	533,097	5,784,268	12,910,339	7,100,686	13.30
TDS	1,492	447,559	3,405,409	40,262,591	26,430,122	58.40

Assumptions:

(1) Tons/day = 1997 tons/300 days

Sources:

TNRCC Annual Reporting Program for Permitted MSW Facilities, 1997 Data Report, Waste Planning Section, November, 1998

1997 Form G submitted for each landfill

Table 6
BFI/Sunset Farms Landfill
Summary of Landfill Inspections
1992-1998

Inspection Date	Purpose of Inspection	County	Inspection Type	Inspection Results	Action
11/9/92	Routine	Travis	Unannounced	The site was in compliance.	General compliance letter sent by TNRCC 11/11/92.
1/27/93	Routine	Travis	Announced	The site was in compliance.	General compliance letter sent by TNRCC 1/29/93.
5/25/93	Routine	Travis	Unannounced	The site was in compliance.	General compliance letter sent by TNRCC 5/26/93.
7/9/93	Routine	Travis		The site was in compliance.	General compliance letter sent by TNRCC 7/12/93.
11/15/93	Routine	Travis		The site was in compliance.	General compliance letter sent by TNRCC 12/3/93.
2/8/94	Routine	Travis		The site was in compliance.	General compliance letter sent by TNRCC 2/28/94.
5/24/94	Routine	Travis		The site was in compliance.	General compliance letter sent by TNRCC 6/10/94.
5/17/95	Routine	Travis		The site was in compliance.	General compliance letter sent by TNRCC 6/16/95.
7/2/95	Routine	Travis		The site was in compliance.	General compliance letter sent by TNRCC 8/16/95.
11/30/95	Routine	Travis		The site was in compliance.	General compliance letter sent by TNRCC 12/13/95.
5/17/96	Routine	Travis	Announced	The site was in compliance.	General compliance letter sent by TNRCC 6/6/96.
11/21/96	Routine	Travis	Announced	The site was in compliance.	General compliance letter sent by TNRCC 12/19/96.
5/21/97	Routine	Travis	Announced	The site was in compliance.	General compliance letter sent by TNRCC 7/3/97.
7/10/97	Routine	Travis		Violations: 330.130 Landfill Gas Control, methane readings exceeded the regulatory limit.	Letter sent to BFI on corrective action to be taken by BFI. Letter noting corrective measures to address violation sent 7/24/97.
7/14/98	Routine	Travis	Announced	The site was in compliance.	General compliance letter sent by TNRCC 7/27/98.

Fifteen (15) inspections have been conducted at the BFI Landfill during the last six (6) years. Of the fifteen (15) inspections violations were noted during one (1) of the inspections. All violations have been addressed.

Table 7
BFI/Sunset Farms Landfill
Summary of Complaints
1993-1998

Date	Complaint Number	County	Complaint Type	Notes	Action
12/5/95	119600161	Travis	Pollution	BFI is cleaning their trucks with something that generates a greenish gray smoke that smells.	Site visit by TNRCC Inspector, no violation found. Resolved 1/04/96
10/2/96	1197000476	Travis	Pollution	Trash truck was not covered, trash was flying out of bed, notably tiny bits of insulation.	Call to BFI of concerns expressed. Resolved 10/02/96
12/12/97	119800015	Travis	Pollution	BFI truck was leaking hydraulic fluid.	Site visit by TNRCC Inspector, BFI crew was spreading pebble grave on oil. Truck was taken out of service and truck operator dismissed. Resolved 9/19/97
1/9/98	119800164	Travis	Pollution	BFI discharges water/diesel contaminant from aboveground storage tank (AST) containment area. Contaminant is flowing across the ground into a storm drain.	Site visit by TNRCC Inspector, found no discharges beyond the containment barrier. Resolved 1/19/98

Four (4) complaints have been filed against BFI/Sunset Farms Landfill during the last five (5) years. All complaints have been resolved.

Table 8
Texas Disposal Systems Landfill
Summary of Landfill Inspections
1992-1998

Inspection Date	Purpose of Inspection	County	Inspection Type	Inspection Results	Action
6/11/92	Routine	Travis		Violation: Intermediate Cover was not properly applied.	Enforcement letter sent to TDS for improper application of intermediate cover. Site must be in compliance prior to 7/31/92.
10/2/92	Routine	Travis	Unannounced	The site was in compliance.	General compliance letter sent by TNRCC 13/13/92.
12/22/92	Routine	Travis	Announced	Violation: 330.145(a) Access Roads, mud traced onto FM1327.	Enforcement letter sent to TDS, immediate action must be taken to minimize the amount of mud being tracked onto FM1327. Letter sent 1/8/93.
5/11/93	Routine	Travis	Unannounced	The site was in compliance.	General compliance letter sent by TNRCC 5/17/93.
7/7/93	Routine	Travis	Unannounced	The site was in compliance.	General compliance letter sent by TNRCC 7/8/93.
10/5/93	Routine	Travis	Announced	The site was in compliance.	General compliance letter sent by TNRCC 10/15/93.
2/1/94	Routine	Travis		The site was in compliance.	General compliance letter sent by TNRCC 3/7/94.
11/21/94	Routine	Travis		The site was in compliance.	General compliance letter sent by TNRCC 12/6/94.
2/28/95	Routine	Travis		The site was in compliance.	General compliance letter sent by TNRCC 3/1/95.
5/5/95	Routine	Travis		The site was in compliance.	General compliance letter sent by TNRCC 6/7/95.
7/5/95	Routine	Travis		The site was in compliance.	General compliance letter sent by TNRCC 7/6/95.
2/26/96	Routine	Travis	Announced	The site was in compliance.	General compliance letter sent by TNRCC 3/13/96.
8/15/96	Routine	Travis	Announced	The site was in compliance.	General compliance letter sent by TNRCC 8/19/96.
2/11/97	Routine	Travis		The site was in compliance.	General compliance letter sent by TNRCC 2/14/97.
8/21/97	Routine	Travis		The site was in compliance.	General compliance letter sent by TNRCC 9/4/97.
9/98	Routine	Travis	Announced	The site was in compliance.	General compliance letter sent by TNRCC 5/21/98.

Sixteen (16) inspections have been conducted at the Texas Disposal Systems Landfill during the last six (6) years. Of the sixteen (16) inspections violations were noted during two (2) of the inspections. All violations have been addressed.

Texas Disposal Systems

Table 9
Texas Disposal Systems Landfill
Summary of Complaints
1993-1998

Date	Complaint Number	County	Complaint Type	Notes	Action
8/18/93	930800711	Travis	Compliance	Intermediate cover is not being properly applied, the waste was being spread thin creating a large working face.	Site visit by TNRCC Inspector, found that the working face was larger than normal due to limited fill space. A new SLER was at TNRCC waiting on approval, once approved working face area will be reduced Resolved 8/23/93
10/5/95	119500228	Travis	Pollution	Creeks on property have a petroleum sheen and smell, and pond on the property has a septic odor.	Site investigation was conducted on 11/10/94 by TNRCC Inspector, no violations were noted in the investigation. Resolved 11/22/94
1 '98	119900060	Travis	Pollution	Truck drivers spilling diesel, used oil is spilled near the used oil tank and freon escapes into the atmosphere, and compressor oil spilled.	Site inspection did not appear that TDS has neglected their responsibility, during the inspection ways to improve the operation was discussed. Resolved 12/18/98.

Three (3) complaints have been filed against Texas Disposal Systems Landfill during the last five (5) years. All complaints have been resolved.

APPENDICES

Austin Community Landfill

Con't Texas Waste Systems - EHX File

249 - Sheet 1

- #1 Texas Department of Health - Bureau of Solid Waste
Management - Hearing Examiners File - Permit Application
No. 249 (July 29, 1977) - Longhorn Disposal
- WML/Texas Waste Systems & Travis County
- A. Universal Disposal, Inc. - Application for Approval of Sanitary Landfill
to TDH (12/4/70)
1. Subsurface Investigation - Sanitary Landfill Area -
Austin, Texas - Trinity Engineering (1970)
 2. Deed to Property (December 1969)
- B. TDH letters to Court, Judge , (12/7/70)
Texas Water Quality Board, Travis County Dept. Health,
Austin LaRue, Universal
- C. City of Austin Reply (12/9/70)
- D. Travis County Reply (12/10/70)
- E. Austin Mayor Reply (12/16/70)
- F. TDH Approval of Proposed (12/22/70)
- G. TDH Interoffice Memo - Industrial Waste Disposal (3/17/71)*
- H. TDH request for Evaluation of Site for Industrial Waste to TWQB (4/15/71)
- I. TWQB letter to TDH (4/16/71)*
- J. TDH Recommendation for additional cover (7/16/71)
- K. TDH Inspection Report (1/5/72)*
1. TDH Lab Report (11/18/71)*
- L. TDB Interoffice memo (5/3/72)*
- M. TWQB Interoffice memo - Investigation (2/3/73)*
- N. Travis Co. Investigative Report - (Longhorn Disposal) (9/4/73)*
- O. TDH Notification of Travis Co. Health Department (10/12/73)
- P. TDH Acknowledgment of Ownership Change (10/12/73)
1. Notification of Ownership Change (10/3/73)

249 - Sheet 2

- A. Texas Air Control Board Notification of Borough Violation (1/3/74)
- B. Site Ownership - Info. needed - TWQB (1/11/74)
- C. Texas Air Control Board memo on burning (1/25/74)
1. Longhorn reply to burning (1/17/74)
- D. TWQB Interoffice memo - Longhorn proposed to old industrial waste site as
Municipal Waste Site (3/24/74)
- E. TWQB Investigation of seepage complaint (4/18/74)*

- F. Meeting notes on proposed municipal landfill (3/27/74)
- G. TDH letter on Water Quality Concerns (5/23/74)
- H. TWQB approval of pumping out and pit #4 (6/19/74)*
 - 1. TDH Inspection Report (7/16/74)
- I. Application for Type I Municipal Solid Waste Disposal permit (8/5/74)
- J. Subsurface Investigation - Chemical Storage Pits - Trinity Engineering (8/5/74)
- K. TDH Application Evaluation checklist for Solid Waste Disposal Site (9/5/74)
- L. Survey Field Notes (10/9/70)
- M. TDH Bacteriological Water Analysis (9/27/74)
- N. TDH Request of TWQB to review landfill application (9/16/74)
 - " " " Texas Water Development Board landfill application
 - " " " Texas Air Control Board landfill application
 - " " " County Judge landfill application
 - " " " Mayor of Austin landfill application
 - " " " Travis Co. Health Dept. landfill application
- O. Reply by Mayor (9/27/74)
- P. Reply by TWDB (9/30/74)
- Q. TDH Interoffice Memo - Transfer of Site Approval from Universal to Longhorn (10/10/74)
- R. TDH Notification of Transfer Approval (10/10/74)
- S. City of Austin Reply to Transfer (10/11/74)

249 Sheet 3

- 1. TACB Review of Landfill Permit (10/11/74)
- 2. TWCB Review of Landfill Permit (10/23/74)
- 3. TDH Survey & Industrial Waste Report (9/25/74)*
- 4. File Notes - Landfill Ownership Transfer (8/28/73)
- 5. Newspaper Clips on Improper Disposal (2/12 & 13/75)*
- 6. TDH Interoffice Memo (3/17/75)
- 7. Kemp & Spilker letter to TDH (3/28/75)
- 8. TDH Application for a Permit to Operate a Municipal Solid Waste Facility (No.249) (3/31/75)
- 9. Del-Worth Industries, Inc. Letter to TDH-drum removal (6/30/75)*
- 10. TDH site visit memo (2/5/76)
- 11. TDH letter to Kemp, Ournstreet & Spiller - acceptable wastes (4/9/76)
- 12. Kemp, Ournstreet & Spiller request of TDH to accept wider variety of wastes (4/9/76)*
- 13. Hancock & Associates request to dispose (4/7/76)*
- 14. Gleatron disposal request (4/7/76)*
- 15. Austin American Statesman disposal request (4/8/76)*
- 16. W.C. Colten Waste Evaluation (4/19/76)*
- 17. TDH Telephone memo on new waste streams (4/20/76)
- 18. TDH letters to KOS on new waste handling (5/3/76)*
- 19. KOS request of TDH for additional waste disposal (4/22/76)
- 20. KOS request of TDH-additional waste (5/11/76)

21. TDH letter to Longhorn (5/14/76)
 - a. Longhorn info request to TDH (5/12/76)
22. Woodward Inc. Request to dispose waste (5/13/76)*
23. TDH letter to Longhorn on waste handling (6/3/76)*
 - a. Longhorn request to dispose additional waste (6/1/76)
24. W.C. Cotten report on waste disposal (5/29/76)
25. W.C. Cotten report on waste disposal (6/27/76)
26. Handwritten date (unknown)
27. Longhorn disposal request to TDH (8/12/76)
28. W.C. Cotten report on waste disposal (8/12/76)
29. TDH request reply (8/13/76)*
25. TDH inspection report (8/10/76)
26. Longhorn request of TDH (8/3/76)
27. TDH reply to Longhorn request (7/12/76)*
28. Longhorn request of TDH - additional waste (7/7/76)
29. Jefferson Chemical request of Longhorn (7/2/76)

249 Sheet 4

1. Jefferson Chemical Co. request (6/8/76)
2. TDH phone memo - additional waste (8/12/76)*
3. TDH phone memo - additional waste (8/19/76)
4. TDH interoffice memo (8/20/76)
5. TDH letter to TWQB - permit review (8/20/76)
6. TACB
7. TWDB
8. Travis C. Health Dept.
9. Mayor of Austin
10. FAA
11. USACE
12. Reafuro - County Judge
13. TDH & PT
14. TDH letter to Longhorn - permit delay (8/23/76)
15. TDH telephone memo (8/23/76)
16. FAA reply (8/30/76)
17. TDH approval of waste disposal (8/30/76)*
18. TACB reply (9/8/76)
19. Dept. Of Highways reply (9/8/76)
20. TDH interoffice memo (9/15/76)
21. Texas WDB reply (9/17/76)
22. TWGB reply (9/16/76)
23. COA reply (9/17/76)
24. COA reply (9/20/76)
25. Memo from M. McReynolds to Holver Reed - landfill inspection (9/16/76)*

26. TDH letter to IRS (11/18/76)
27. Longhorn request of info from TDH from IRS (11/4/76)
28. Longhorn letter to TDH (9/7/76)
29. TWQB request of Longhorn to do a subsurface study (1/7/77)
30. TDH interoffice memo - problems (2/25/77)*
31. TDH interoffice memo - public hearing announcement (6/20/77)
32. Notice of Hearing (6/77)
33. Notice of Public Hearing (7/25/77)
34. TDH Notice of Public Hearing (6/24/77)
35. TDH Site visit memo (7/6/77)
36. TDH Interoffice memo & site inspection report (7/13/77)

249-A Sheet 4

1. TDH letter to Austin Community Disposal Company - Notice for Filing Application (1/13/81)*
2. TDH interoffice memo - Notice for Filing Application (1/31/81)*
3. Austin American Statesman - Affidavit of Publication (1/16/81)
4. TDH checklist for classifications on Solid Waste Disposal Facilities (1/23/81)
5. TDH Site Evaluation Report (1/23/81)
6. TX Dept. Of Highways letters (1/22/81)
7. COA Mayor letter to TDH (1/27/81)
8. TDWR letter to TDH (2/9/81)
9. Austin Community Disposal Company (ACDC) letter to TDH (2/11/81)
10. TDH letter to ACDC - Notice of Public Hearing (2/10/81)
11. TDH letter to TDWR (2/18/81)
12. TxDH & PT approval (2/11/81)
13. Longhorn letter to TDH - Clarification of Permit (2/16/81)
14. Survey Report (2/17/81)
15. Pittman letter to TDH - Clarification of Permit (2/16/81)
16. TDH letter to TDWR - Permit Amendment (2/19/81)
17. TDH Notification of Change in Public Hearing (2/23/81)
18. TDH Notice of Public Hearing (2/23/81)
19. TACB comments on Permit (2/25/81)
20. Councilman Goodman letter to TDH - Warning of Expansion (2/24/81)*
21. TDH reply to Councilman Goodman (2/27/81)

249-A Sheet 5

1. ACDC - Maintenance Improvements on Old Industrial Waste Site - Pittman Engineering (3/81)*
2. TDH interoffice memo - Public Hearing (3/3/81)
3. TDWR Assumes Regulatory responsibility of original landfill (3/5/81)
4. TDWR to TDH Approval of Amending Permit (3/5/81)
5. TDWR to TDH Supervision of Remediation (3/5/81)

6. Official Permit Notice 249-A
7. E. Wild letter to TDH - Landfill concern
8. TDH interoffice memo - site evaluation (4/10/81)
9. Press release from TDH (3/11/81)
10. Pittman Eng - Cover letter from Maintenance improvements in Old Industrial Waste area (3/12/81)
11. Travis Co. Engineer comments on Permit 249-A (3/12/81)*
12. Permit checklist

249-A Sheet 6

1. Permit checklist
2. TDH interoffice memo (3/12/81)
3. TDH request of TDWR invorcant (3/12//81)
4. TDH receipt of order (3/12/81)
5. Legal pocket for motion to halt permit - before the dump committee (3/19/81)
6. Letter from Mayor to TDH withdrawing approval for Permit 249-A (3/19/81)
7. Letter from E. Sumdeck to Dr. Bernstein
8. Frank Eck letter to TDH (3/19/81)
9. TxDH &PT letter to TDH - Traffic (3/19/81)
10. Engineering report of ACDC, Inc. - Pittman Engineering (12/80)
11. Travis County Commissioner - Road Improvements (12/15/80)
12. TX Dept. Of Hwys & Public Trans. - Refusal of Approved (11/19/80)
13. TDH dismissal of motion (3/23/81)
14. TDH announcement to consolidate motions (3/26/81)
15. Councilwoman Himmelban letter to TDH (3/17/81)

249 Sheet 5

1. TDH Inspection Report (7/13/77)
2. TDH Violation letter to Longhorn (7/19/77)
3. TDH interoffice memo - Geologist Report (7/28/77)
4. TDH interoffice memo - Public Hearing (7/29/77)
5. TDH approval of site - Permit Application (7/29/77)
6. TDH letter of Approval to Longhorn (9/30/77)
7. TDH Permit 249 (9/26/77)
8. TDH Inspection Report (11/10/77)
9. Permit Transfer (4/6/78)
10. Glastrous Waste (7/12/78)
11. TDH Inspection Report (8/15/78)
12. TDH Inspection Report (10/23/78)

249 Sheet 6

1. TDH Inspection Report (10/14/78)

2. TDH Letter to Longhorn - Review Disposed (10/10/78)
3. TDH to Longhorn - Trench soils (2/13/79)
4. Longhorn to TDH - Assignment of Engineer (3/29/79)
5. TDH Forms (5/30/79)
6. TDH Request for Certification (6/12/79)
7. Pittman Certification of Soils (6/18/79) with
8. TDH to Longhorn - Landfill classification (8/30/79)
9. TDH to Mitro Corporation - list of Municipal Landfills in Texas Accepting Hazardous or Special Wastes (10/10/79)*
10. Mitro mailgrams to TDH. Hazardous & special wastes list request (8/28/79)
11. TDH Inspection Report (10/5/79)
12. TDH Inspection Report (11/29/79)
13. TDH Longhorn - New Report Form (4/16/80)

249-A Sheet 7

1. TDH to TDWR (3/30/81)
2. Motion of Consolidation (3/30/81)
3. TDH Overviews of Consolidations with flow (4/1/81)*
4. TDWB Evaluation of Permit Revision (4/3/81)
5. TWDB to TDH (2/27/81)
6. TWDB to ACDC - IWMM site evaluation (4/3/81)
7. TWDB to TDH - (4/3/81)*

249 Sheet 7

1. Surveys Report (4/29/80)
2. Pittman Engineering - Geotechnical Investigations (5/15/80)
3. TDH Field Investigation memo (6/25/80)*
4. TDH interoffice memo (6/23/80)
5. Groundwater Analysis Reports (6/13/80)
6. Pittman transmittal letter to Holt & Assoc. (7/16/80)
7. TDH deposit of revenue from sale (7/18/80)
8. TDH phone log (7/17/80)
9. TDH memo to file - Permit Amendment (7/18/80)
10. Pittman Sub-surface Investigations (8/4/80)
11. Pittman Sub-surface Investigations (9/9/80)*

249 Sheet 8

1. Pittman Sub-surface Investigation (Con't.) (9/9/80)
2. Office memo (2/10/80)
3. Letter to TDH from TDWR (no date)*

249-A Sheet 1

1. Application for Permit 249-A (9/16/80)
2. SCS Soils Report (6/74)
3. Sale Contract (1980)
4. Survey's Report (1980)
5. TDH Interoffice Memo - RAJ Associates Phase II Report (10/9/80)
6. TDH Interoffice Memo - Sub-surface Investigation (10/10/80)
7. TDH letter to J. Wilde (10/30/80)
8. TDH letter to Pittman - Review of Reports (11/19/80)
9. TWCB letter to TDH (11/26/80)
10. TDWR Interoffice memo - Leaking at Landfill (8/22/80)
11. TDWR Interoffice memo - Landfill seepage (8/22/80)
12. TX DPH & PT to Pittman - Traffic evaluation (12/5/80)
13. Travis Co. Commission to Pittman (12/15/80)
14. TDH to Pittman - Report Review (12/18/80)
15. Pittman Engineering Report for ACDA Landfill (12/80)

249-A Sheet 2

1. Pittman Engineering Report (Con't) (12/80)
2. TxDH & PT to Pittman - Traffic (12/5/80)
3. Notice of Appointment of Pittman Eng (9/12/80)
4. Survey Field Notes (4/29/80)
5. Pittman Geotechnical Investigation (5/15/80)
6. Pittman Sub-surface Investigation (8/4/80)

249-A Sheet 3

1. Pittman Sub-surface Investigation (Con't) (8/4/80)
2. Pittman Sub-surface Investigation (9/9/80)
3. Pittman concept of Operative Reports (12/80)
4. Travis Co. To Pittman - Giles Land Improvements (12/17/80)
5. Travis Co. To Pittman - Aews to Giles Land (12/16/80)
6. Travis Co. To TxDH & PT - Mud on Roadway (12/16/80)
7. TxDH & PT to Pittman - application denied (11/19/80)
8. Pittman to TxDH & PT (9/5/80)
9. TDH interoffice memo (1/12/81)
10. Request for comments worksheet (1/8/81)
11. TDH Interval request for Site Evaluation & Inspection (1/12/81)
12. TDH transmittal letter to TACB (1/12/81)
13. TDH to TDWR transmittal letter (1/12/81)
14. TDH transmittal to TxDH & PT (1/12/81)
15. TDH transmittal to Travis Co. Health Dept. (1/12/81)
16. " " " City Mayor " "

17. TDH transmittal to County Judge
18. TDH memo to File (1/13/81)
19. TDWR to TDH - Approval (1/14/81)
20. TDH to TDWR (3/30/81)

249-A Sheet 8

1. Pittrrad Plan - comments (3/12/81)
2. Mayor letter to TDH - Letter of Acceptance (1/27/81)
3. Mayor withdrawal of Approval (3/19/81)
4. R. Goodman to TDH (2/24/81)
5. Comments on Permit (2/27/81)
6. TDH reply to W. Dulco (4/17/81)
7. W. Dulco to TDH (4/8/81)
8. TDH interoffice Memo (4/17/81)
9. TDH reply to P. Moore (4/21/81)
10. TDH Geology Report (5/22/81)*
11. TDH Permit Application Review Hearing Notes (5/26/81)
12. Scralan, Buckle & Fleckman Brief (6/8/81)
13. Doggett & Jacks Response Brief (6/9/81)

249-A Sheet 9

1. Dogget & Jacks Brief (con't) (6/9/81)
2. TDH Proposal for Decision (6/18/81)
3. Hooper, Robinson & Moeller - Request for Clarification of Proposed Decision (7/3/81)
4. Pittman to TDH - Clarification of Permit (2/16/81)
5. Doggett & Jacks - Opponents Response to Brief (7/6/81)

249-A Sheet 10

1. Hooper, Robinson & Moeller - Reply to Opponents Exception to the Proposed for Decision (7/20/81)
2. H, R & M Corrections to Reply (7/21/81)
3. Permit / Denial Checklist (8/6/81)
4. TDH interoffice memo - Permit Finalization (7/31/81)
5. TDH Finalized Permit 249-A (8/6/81)

249-A Sheet 11

1. Marstin motion for rehearing (8/14/81)
2. H, R & M Reply to motions for Rehearing (8/21/81)
3. TDH Denial of Rehearing (9/3/81)
4. TDH memo to file - W. Pelco office (9/9/81)
5. COA to TDH (8/18/81)

6. COA to TDH (9/81)
7. San Antonio Express Article (9/28/81)
8. TDH to Mark White, Attorney General - Right for Petition (10/6/81)
9. Citation of TDH (10/28/81)
10. Ban the Pump Committee Petition (10/81)
11. TDH to Doggett & Jacks (10/7/81)
12. Attorney General Assignment of Laws (10/9/81)
13. Certificate relation to Exhibits (5/5/81)
14. TDH - reply to W. Delco Request (10/14/81)
15. W. Delco Request of Landfill moving (9/22/81)
16. TDH letter to ACDC - deadline (10/15/81)
17. TDH site inspections report (9/18/81)
18. TDH memo to file (9/14/81)

249-A Sheet 12

1. Pittman Trench Certification (10/19/81)
2. Jack Holt & Assoc. - Soil Evaluation (10/15/81)
3. TDH Review of Pittman Reports (10/26/81)
4. Waste Management Plan for Resistivity Survey (10/19/81)
5. TDH Soils and Line Evaluation Questionnaire (10/16/81)
6. TDH Memo to File (10/28/81)
7. Landfill Permit Board (10/21/81)
8. Longhorn Notification of Corporate Status (10/23/81)
9. W. Delco letter to TDH (10/22/81)
10. Transmittal of Engineering Design Plans to Seligman O'Pyle (11/6/81)
11. TDH Memo to File (11/5/81)
12. TDH letter to ACDC - Gile Road Reconstruction (11/12/81)
13. SW labs Initiated Earth Resistivity Study (12/1/81)

249-A Sheet 13

1. SW labs Initial Earth Resistivity Study con't.

249-A Sheet 14

1. SW labs con't.
2. Waste Management to TDH-Proposed GW monitoring plan (1/3/82)
3. URM Analytical Report (1/5/82)
4. Augaleb Report (11/30/81)
5. Scanlon, Buichle & Fleckman to E. Wilder & M. Wooten (1/28/82)
6. Waste Management to TDH - Proposed Wells (1/29/82)
7. TDH Memo to File - Record of Interviews (1/28/82)
8. " " " " " " " "
9. " " " " " " " "

10. * * * * *
11. TDH Interoffice Memo - Review of Sale Information to E. Wilder (2/1/82)
12. TDH transmittal of information to KVUE (2/1/82)
13. TDH Review of Resistivity Survey (2/17/82)
14. TDH letter to E. Wilder (2/26/82)
15. E. Wilder letter to TDH (2/9/82)
16. TDH file transmittal to KVUE (4/5/82)
17. TDH letter to ACDC (4/7/82)
18. TDH Site Inspection Report (3/8/82)
19. TDH Groundwater Reports (4/15/82)
20. Water Management to TDH - Personnel List (7/1/82)
21. TDH Groundwater Reports (7/21/82)
22. TDH Memo to File - Discolored Iron count (8/13/82)

249-A Sheet 15

1. TDH to Waste Management - Evaluation of Truck FireWaste (8/4/82)
2. TDH Memo to file - Red Arrow Disposal Request (8/3/82)
3. TDH to Applied Research Lab - Permission to Dispose foam (8/13/82)
4. TDH to Waste Management - Review of Soils & Line Evaluation Questionarie (8/19/82)
5. Community Engineering Company Trench Certification (8/3/82)
6. Pretest Labs - Soil Permeability Tests (7/29/82)
7. URM Groundwater Report (8/31/82)
8. TDH to Waste Management - Site Investigation (9/10/82)
9. TDH Site Inspection Report (8/31/82)
10. TDH to Waste Management - Questionare Review (9/16/82)
11. URM Plan Modifications (8/3/82)*
12. TDH to Waste Management - Changes needed in Permit (9/21/82)
13. TDH to S. Carollina DH - Commendation of Waste Management (9/27/82)*
14. S. Carolina DH to TDH (9/14/82)

249-A Sheet 16

1. URM Surface Water Monitoring Report (11/9/82)
2. Waste Management to TDH - Permit Transfer (11/30/82)
3. TDH transmittal of Formal Permit (12/9/82)
4. URM transmittal to TDH of Monitoring Wall Installation Report (1/6/83)
5. Waste Management Annual Earth Resistivity Survey (12/22/82)

249-A Sheet 17

1. TDH to Longhorn - Motorola Conteminated Soil (1/11/83)
2. Longhorn to TDH - Morotoral Contaminated Soil (1/5/83)
3. TDH Review of Soils Questionaire (1/14/83)
4. Community Engineering Truck Certification (1/4/83)

5. Pre-test Laboratory Soil Tests (12/28/83)
6. TDH Memo to File - Extension for Sampling Deadline (1/17/83)
7. TDH confirmation of Resistivity Survey (1/24/83)
8. TDH transmittal of permit to Texas Waste Systems (12/1/83)
9. TDH approval of permit transfer (12/18/83)
10. TDH Interoffice Memo - File transmittal to H. Clinton (8/19/83)
11. URM reporting of GW samples (3/14/83)*
12. URM monitor well installation report (12/8/82)
13. TDH Memo - Record of interview with Austin-American Statesman
14. TDH Memo (3/17/83)
15. TDH Memo - Record of interview with Austin-American Statesman (2/28/83)

249-A Sheet 18

1. TDH record of interview with Austin-American Statesman (4/18/83)
2. TDH Complaint form - Round Rock Waste Disposal (1983)
3. TDH interview with Channel 36 News (5/4/82)
4. TDH to Waste Management - Inspection Results (5/9/83)
5. TDH Site Inspection Report (4/11/83)
6. TDH Groundwater Analysis
7. TDH Review of Evaluation Questionnaire (7/8/83)
8. Community Engineering Certification (6/16/83)
9. Pretest Lab Soil Testing Results (6/10/83)
10. Waste Management Groundwater Report (7/8/83)
11. TDH Analytical Report (7/18/83)
12. TDH Comments of Evaluation Questionnaire (7/6/83)
13. Community Engineering sods & liners evaluation Report (8/19/83)
14. Pre-test lab soil report (8/15/83)
15. TDH Groundwater Reports (9/19/83)
16. Chubb & Sons - Federal Insurance Company Ride to TDH (10/21/83)
17. TDH memo to file - Request for disposal of paint sludge (10/20/83)
18. TDH Complaint form - Burning at landfill (11/7/83)

249-A Sheet 19

1. TDH groundwater analysis requests (12/1/83) (12/8-9/83)
2. TDH Site Inspection Report (11/7/83)
3. Waste Management Groundwater report (12/30/83)
4. TDH Review of Annual Resistivity Survey (1/6/84)
5. Waste Management Resistivity Survey (12/9/83)

249-A Sheet 20

1. Resistivity Survey (con't.) (12/9/83)
2. TDH memo to file - suggestion of WWTP sludge disposal (3/9/84)
3. TDH Notification of difficulty of GW Monitoring Report (3/13/84)
4. TDH Site Inspection Report (3/1/84)
5. TDH comments on soils and line Quality Control Plan (SLQCP) (4/20/84)

249-A Sheet 21

1. Soil and Liner Quality Control Plan (3/23/84)
2. Notification of Revised due Dates of SLQCRs (4/23/84)
3. URM Groundwater Report (4/26/84)
4. TDH Memo to File - COA Request for 290 cleanup (5/7/84)
5. TDH Approval for Trash Burning for brush (5/21/84)
6. Lloyd, Gorselink & Ryan request of trench burning to TDH (4/21/84)
7. THCB comments on trench burning (4/3/83)
8. THCB permission for exemption (3/13/84)
9. TDH Review of SLQCR (5/31/84)
10. SLQCR (6/15/84)
11. TPH comments on SLQCR (7/3/84)
12. SLQCR (6/15/84)
13. Groundwater monitoring report (7/11/84)
14. TDH Site Inspection Report (6/29/84)
15. Groundwater Monitoring Report (9/10/84)

249-A Sheet 22

1. Groundwater Report (con't.)
2. TDH review of SLER (10/16/84)
3. Pittman Engineering trench Certification (9/28/84)
4. Summary Judgement - Permit (10/15/84)
5. TDH Meeting notes on Litter Reduction (11/9/84)
6. TDH Groundwater - Analysis Requests (11/28/84)
7. TDH Site Inspection Report (11/9/84)
8. Waste Management Environmental Policy Statement - Banning of Non-Hazardous Liquids from Municipal Landfills (12/12/84)*
9. Waste Management Annual Earth Resistivity Survey (1/17/85)

249-A Sheet 23

1. Resistivity Survey (con't.)
2. TDH Reception of Survey (2/8/85)
3. Monitoring Wall Sample Analysis (3/5/85)*
4. Monitoring Wall Sample Analysis (3/26/85)*

5. Waste Management Soils and Liner Evaluation Report (5/1/85)

249-A Sheet 24

1. TDH Site Inspection Report (5/8/85)
2. TDH SLER Acceptance (6/14/85)
3. SLER (6/7/85)
4. Monitoring Wall Analysis (6/25/85)*
5. TDH Authorization of Asbestos Waste Disposal (7/25/85)
6. Waste Management Request to Dispose Asbestos (7/16/85)
7. TDH Notice of Violation - Cover (7/31/85)
8. TDH Site Inspection Report (7/10/85)
9. SLER (8/2/85)
10. TDH Approval of disposal of Soil from the 100 Longview site (8/6/85)*

#9

1984,5	SLER forms, OW monitoring forms
1985	11/13 letter - violation - water discharge
1985	Operating hours letters
11/85	GWMR form letters
11/85	Acceptance letter for SLER
11/85	SLER Report, SLER Questionnaire
3/85	SLER Report forms
8/85	Notice of Compliance from TDH
9/26/77	Permit - TDH
3/84	SLER Report
1/86	Trench evaluation reports, compaction reports
84	SLER report

#10

1/86	SLER report
1/86	Violation - letter - markers needed
12/85	Trench inspect reports
1/14/86	GW monitoring results, mw data sheets
	Landfill completion plan - maps
12/85	Design Modification - ACL - drawings for

#11

9/86	Trench inspection reports
9/86	SLER
3/86	SLER
9/86	Accept fire clean-up debris - fuel area
2/86	Soil tests, trench inspections

3/86 SLER
 9/86 Letter about policing roads
 3/86 More soil compaction tests, SLER

#12

3/86 GW monitoring report

#16

Gas recovery project information
 Permit application - gas recovery facility
 Monitor well installation logs

#17

WMI Annual Report

249-C

#1 Hearing Examiners File

1. Permit App. Expansion (5/26/81)
2. Proposal for Decision (6/18/81) copied
3. Findings of Fact
4. Special Provisions
5. Permit Issuance (8/27/81)
6. Letter to Appeal (10/7/81)
7. Clarification of Proposal /Decision (7/20/81)
8. Hearing Exhibits
9. Bill of Exception
10. Brief

#2

1. Exception to clarification on Proposal for decision
2. Application Amendment (2/16/81)
3. Field Notes
4. Opponents exception to to Proposal /Decision (includes request for new hearing) (7/81)
5. Applicants reply to opponents exception
6. Motion for rehearing (8/12/81)

#3

1. Reply to motions for rehearing (8/21/81)
2. Order - rehearing (denied)

3. Appeal (10/1/81)
4. Appeal (9/11/81)
5. Exhibit 4 - ACL Part A application
6. Exhibit 5 - ACL Part B
7. TX Dept. Of Hwy letter - re adequacy of highways (11/80)
8. Pittman Eng - letter response to above

#4

1. Maps - Site/Existing/Proposed
2. Field Notes
3. Atterberg limits & Permability
4. Geotechnical Investigations Report and Lab Analysis (5/80)
5. Subsurface Investigations & Lab Analysis (8/80)
6. Concept of Operation - Rpt

#5

1. Cont'd of above
2. Exhibit 6 - Type I Amendment
3. Memo Request

#6

1. Letter from concern neighbor
2. Permit Application #249A
3. Motions
4. Soil Survey

#7

1. Soil Survey

#8

1. Soil Survey

#9

1. Soil Survey

#10

1. Soil Survey
2. Motions (8/80)

3. Hydrogeologic evaluation URM (3/81)
4. Complaints
5. Leakage into trib
6. Memo TX Dept. Of Water Resources Hist. Of site

#11 Memo - Hist of Industrial site

1. Cease & desist (5/72)
2. Complaint letter from COA (9/73)
3. Complaint letter from Air Control Board
4. Inspection Report from TDH
5. Complaint letter from Air Control Board (9/76)
6. Permit Appl. - prob/landfill (9/76)
7. Violation letter by COA (9/76)
8. Violation letter by COA (7/77)
9. TDH Inspection Report (5/77)
10. TDH Inspection Report (10/79)
11. TDH Inspection Report (3/81)
12. TDH Acceptance of Methylene Chloride Acetone (5/76)
13. Land Sale Report (3/81)

ACL Landfill#13

1. Memo (5/76)
2. Disapproval memo from Water Quality Development Board (5/74)
- concern receiving industrial waste
3. Type of Waste (4/76)

#14

1. Injunction on Jack Arsenoult
2. Order on Jack Arsenoult
3. Default Judgement on Jack Arsenoult

- #1
 - Permit Application Court Proceeding (9/91)
 - Exhibits enter into evidence (4/81)
- #2
 - Direct examination Permit Application court proceeding
 - Hearing examiner files
- #3
 - Hearing examiner files
 - Land fill construction. Compaction & erosion
- #4
 - Same as above
 - Hearing examiner files TDH & Austin Community Dispos. (4/91)
 - Acid pits
 - Hearing examiner files (5/26)
- #28 Hearing (10/89)
- #29 - #32
 - Hearing
- #33
 - Hearing
 - Commitment for title
- #34
 - Letter of conformation
 - Hearing
 - Travis Co. Resolution
- #35
 - Hearing
- #36
 - Petitions/Oppositions (9/89)
 - Interrogations/Answers 1st set, 2nd set
- #37
 - Deposition (11/89)
 - Discovery Deposition
 - Opponents Interrogatories
 - Motions

#38
Hearing Items

#39
Hearing Items

#40 - #56
Hearing Items/Files

#57
Hearing Files

#58 - #68
Hearing Files

#69
Complaint (4/2/91)
Hearing Files

#70 - #73
Hearing Files

#18
10/19/87 SLER Acceptance letter
Compaction tests
OW monitoring report
WMI Annual Report

#19
10/87 Trench inspectio reports, SLER
11/5/87 Acceptance letter for SLER
9/25/87 Geotech study - proposed expansion

#20
Permit Application letter, transmittal
11/30/87
4/1/87 Deed recordation - Industrial solid waste disposal site
3/81 Proposed improvements on Industrial waste area #1

#21
Groundwater monitoring, Marcch, 1988

#22
Soil compaction and SLER stuff

- #23 Groundwater monitoring 4/88 (TOC in MW - 5, MW - 6)
- #27
 12/28/89 4th quarter GW monitoring reports
 11/3/89 C.O.A. comments on permit app. for expansion of ACL
 10/89 Correspondence about MSW permit applications
- #28
 3/5 1st quarter GW monitoring results
 Compliance summary - TDH
 4/90 TDH report - notes cover erosion
- #29
 7/90 SLER - compaction tests, seive, atterburg, etc.
 2/90 Complaint letter - blowing trash, dogs
 6/90 TDH letter - SLER response letter - complies with GW
 protection requirements
 4/90 GW monitoring
- #30
 7/90 GW monitoring reports
 7/90 Letter of credit to TDH
 8/90 Waste received summary
 8/90 SLER acceptance letter
 3/90 Arthur Andersen reports of statement of income
- #31
 9/15/89 Part A, Site Development Plan - ACL Expansion - Cook-Joyce
- #32
 9/87 Soils report - ACL expansion - Cook-Joyce
 Geotechnical study - ACL Expansion - McBride Ratcliff
- #33
 9/87 Geotechnical study - ACL Expansion - McBride Ratcliff
- #34
 9/89 Site Operating Plan - Cook-Joyce
 Landfill Gas Management Plan
- #35
 12/90 Complaint discharge/resolved; COA recommendations
 Abestos disposal form; soil test perm

Geotechnical Study - McBride Ratcliff

#36		Evidence of Competency; monitoring report, permit	:
#37	9/5/90 12/90	Notice of Withdrawal Inspection (good), Permit	
#38		Permit Groundwater monitoring report	
#39	3/93	Groundwater monitoring reports Permit Application Incident with 55 gallon drum of Haz. Waste	
#40		Permit Application Finding fact & conclusions of low	:
#41	7/91 4/91	Line test & report - Pittman Engineering & Development Co. Compaction test, pretest laboratory Permit	
#42	6/91 6/91	Compaction test, pretest laboratory Liner inspection - Pittman Eng.	
#43	6/91 8/91 8/91	Liner inspection Soil Compaction test pretest lab TDH acceptance of permit 249-C Finding facts & conclusion of low	
#44	7/91	TDH Sample report Special provisions for permit 249-C	

WMI INDEX

PAGE: 129

ACTIVE RECORD DETAIL REPORT
TEXAS NATURAL RESOURCE CONSERVATION COMM

DATE: 04/23/98

TIME: 15:07:44

DEPT. CODE	RECORD IDENTIFICATION	REF. ID	CREATION DATE	EVENT DATE	SUBMIT DATE	VITAL REC.	RETENTION PERIOD	MEDIA CODE
MSW	MSW -000000247-CO VOL: 001 CORRESPONDENCE 1991 -	00204916	07/14/95		07/14/95	NO		P
MSW	MSW -000000247-MA VOL: 001 MAPS 1983 -	00204918	07/14/95		07/14/95	NO		P
MSW	MSW -000000247-RP VOL: 001 REPORTS 1991 SOIL AND LINER EVALUATION REPORT	00204920	07/14/95		07/14/95	NO		P
MSW	MSW -000000247-RP VOL: 002 REPORTS 1992 SOIL AND LINER EVALUATION REPORT ACCEPTANCE	00204921	07/14/95		07/14/95	NO		P
SW	MSW -000000248-CO VOL: 001 CORRESPONDENCE 1991 -	00204923	07/14/95		07/14/95	NO		P
MSW	MSW -000000249-CO VOL: 001 CORRESPONDENCE 1981 - 1991 AMENDMENT C	00204927	07/14/95		07/14/95	NO		P
MSW	MSW -000000249-CO VOL: 002 CORRESPONDENCE 1/92 - 12/92 AMENDMENT C	00204935	07/14/95		07/14/95	NO		P
MSW	MSW -000000249-CO VOL: 003 CORRESPONDENCE 1/93 - 7/93 AMENDMENT C	00204963	07/14/95		07/14/95	NO		P
MSW	MSW -000000249-CO VOL: 004 CORRESPONDENCE 8/93 - 8/94 AMENDMENT C	00204967	07/14/95		07/14/95	NO		P
W	MSW -000000249-CO VOL: 005 CORRESPONDENCE 4/7/94-6/20/95 C AMENDMENT C	00204969	09/11/97		09/11/97	NO		P

PAGE: 130

ACTIVE RECORD DETAIL REPORT
TEXAS NATURAL RESOURCE CONSERVATION COMM

DATE: 04/23/98

TIME: 15:07:46

DEPT. CODE	RECORD IDENTIFICATION	REF. ID	CREATION DATE	EVENT DATE	SUBMIT DATE	VITAL REC.	RETENTION PERIOD	MEDIA CODE
MSW	MSW -000000249-CO VOL: 006 CORRESPONDENCE 7/21/95-12/29/95 C AMENDMENT C	00209209	09/11/97		09/11/97	NO		P
MSW	MSW -000000249-CO VOL: 007 CORRESPONDENCE 1/11/96-9/30/96 C AMENDMENT C	00230086	09/11/97		09/11/97	NO		P
MSW	MSW -000000249-CO VOL: 008 CORRESPONDENCE 10/2/96-12/23/96 C AMENDMENT C	00240908	09/11/97		09/11/97	NO		P
MSW	MSW -000000249-CO VOL: 009 CORRESPONDENCE 1/10/97-12/16/97 AMENDMENT C	00260641	02/19/98		09/11/97	NO		P
MSW	MSW -000000249-CO VOL: 010 CORRESPONDENCE 01/05/98 -- AMMENDMENT C	00277776	02/19/98		02/19/98	NO		P
MSW	MSW -000000249-EX VOL: 001 EXHIBIT HEARING FILES APPLICATION FOR TEXAS DEPARTMENT OF HEALTH - TEXAS WASTE SYSTEMS INC AMENDMENT A AND C	00231877	08/08/95		08/08/95	NO		P
MSW	MSW -000000249-MA VOL: 001 MAPS 1973 - 83 AMENDMENT C	00205054	07/17/95		07/17/95	NO		F
MSW	MSW -000000249-MA VOL: 002 MAPS 1973 -	00237764	07/17/95		07/17/95	NO		F
MSW	MSW -000000249-RP VOL: 000 REPORTS 1989 PART A AND SITE DEVELOPMENT PLAN PERMIT AMENDMENT APPLICATION 249-C	00259357	08/12/97		08/12/97	NO		P
W	MSW -000000249-RP VOL: 001 REPORTS 1992 SOIL AND LINER EVALUATION REPORT ACCEPTANCE	00236283	09/25/96		09/25/96	NO		P

PAGE: 131

1
ACTIVE RECORD DETAIL REPORT
TEXAS NATURAL RESOURCE CONSERVATION COMM

DATE: 04/23/98
TIME: 15:07:49

DEPT. CODE	RECORD IDENTIFICATION	REF. ID	CREATION DATE	EVENT DATE	SUBMIT DATE	VITAL REC.	RETENTION PERIOD	MEDIA CODE
MSW	MSW -000000249-RP VOL: 002	00236284	09/25/96		09/25/96	NO		P
	REPORTS 1992 ANNUAL RESISTIVITY SURVEY							
MSW	MSW -000000249-RP VOL: 003	00236285	09/25/96		09/25/96	NO		P
	REPORTS 1992 SOIL AND LINER EVALUATION REPORT AMENDMENT C							
MSW	MSW -000000249-RP VOL: 004	00236286	09/25/96		09/25/96	NO		P
	REPORTS 1992 SOIL AND LINER EVALUATION REPORT							
MSW	MSW -000000249-RP VOL: 005	00236287	09/25/96		09/25/96	NO		P
	REPORTS 1992 COMPREHENSIVE HYDROGEOLOGICAL ASSESSMENT							
MSW	MSW -000000249-RP VOL: 006	00236288	09/25/96		09/25/96	NO		P
	REPORTS 1992 SOIL AND LINER EVALUATION REPORT ACCEPTANCE							
MSW	MSW -000000249-RP VOL: 007	00236289	09/25/96		09/25/96	NO		P
	REPORTS 1992 SOIL AND LINER EVALUATION REPORT ACCEPTANCE							
MSW	MSW -000000249-RP VOL: 008	00236290	09/25/96		09/25/96	NO		P
	REPORTS 1992 ANNUAL EARTH ELECTRICAL RESISIVITY SURVEY							
MSW	MSW -000000249-RP VOL: 009	00236291	09/25/96		09/25/96	NO		P
	REPORTS 1993 ANNUAL EARTH ELECTRICAL RESISTIVITY SURVEY							
MSW	MSW -000000249-RP VOL: 010	00236292	08/15/97		08/15/97	NO		P
	REPORTS 1993 SOIL AND LINER EVALUATION REPORT ACCEPTANCE							
MSW	MSW -000000249-RP VOL: 011	00236295	09/25/96		09/25/96	NO		P
	REPORTS 1993 SOIL AND LINER EVALUATION REPORT ACCEPTANCE							

PAGE: 132

ACTIVE RECORD DETAIL REPORT
TEXAS NATURAL RESOURCE CONSERVATION COMM

DATE: 04/23/98

TIME: 15:07:52

DEPT. CODE	RECORD IDENTIFICATION	REF. ID	CREATION DATE	EVENT DATE	SUBMIT DATE	VITAL REC.	RETENTION PERIOD	MEDIA CODE
MSW	MSW -000000249-RP VOL: 012	00236296	08/12/97		08/12/97	NO		P
	REPORTS 1993 CLASS I MODIFICATION AMENDMENT C							
MSW	MSW -000000249-RP VOL: 013	00236297	09/25/96		09/25/96	NO		P
	REPORTS 1993 COMPREHENSIVE HYDROGEOLOGIC ASSESSMENT							
MSW	MSW -000000249-RP VOL: 014	00236298	09/25/96		09/25/96	NO		P
	REPORTS 1994 1993 ANNUAL EARTH ELECTRICAL RESISTIVITY SURVEY							
MSW	MSW -000000249-RP VOL: 015	00236299	09/25/96		09/25/96	NO		P
	REPORTS 1994 SITE OPERATING PLAN AMENDMENT C							
SW	MSW -000000249-RP VOL: 016	00236300	09/25/96		09/25/96	NO		P
	REPORTS 1994 CHAPTER 330, SUBCHAPTER L LOCATION RESTRICTION DEMONSTRATIONS							
MSW	MSW -000000249-RP VOL: 017	00236301	09/25/96		09/25/96	NO		P
	REPORTS 1994 CLASS I PERMIT MODIFICATION AMENDMENT C							
MSW	MSW -000000249-RP VOL: 018	00236302	09/25/96		09/25/96	NO		P
	REPORTS 1994 POTENTIAL GAS MIGRATION AMENDMENT C							
MSW	MSW -000000249-RP VOL: 019	00236303	09/25/96		09/25/96	NO		P
	REPORTS 1994 GROUNDWATER MONITORING REPORTS FOR SECOND QUARTER							
MSW	MSW -000000249-RP VOL: 020	00236305	09/25/96		09/25/96	NO		P
	REPORTS 1994 GAS PIEZOMETER INSTALLATION REPORT							
SW	MSW -000000249-RP VOL: 021	00236304	09/25/96		09/25/96	NO		P
	REPORTS 1994 GAS MONITORING PROBE INSTALLATIONS							

PAGE: 133

ACTIVE RECORD DETAIL REPORT
TEXAS NATURAL RESOURCE CONSERVATION COMM

DATE: 04/23/98
TIME: 15:07:55

DEPT. CODE	RECORD IDENTIFICATION	REF. ID	CREATION DATE	EVENT DATE	SUBMIT DATE	VITAL REC.	RETENTION PERIOD	MEDIA CODE
MSW	MSW -000000249-RP VOL: 022	00236306	09/25/96		09/25/96	NO		P
	REPORTS 1994 GROUNDWATER SAMPLING AND ANALYSIS PLAN AMENDMENT C							
MSW	MSW -000000249-RP VOL: 023	00236307	09/25/96		09/25/96	NO		P
	REPORTS 1994 SOIL AND LINER EVALUATION REPORT AMENDMENT C							
MSW	MSW -000000249-RP VOL: 024	00236308	09/25/96		09/25/96	NO		P
	REPORTS 1994 AUTHORIZATION TO ACCEPT A SPECIAL WASTE							
MSW	MSW -000000249-RP VOL: 025	00236309	09/25/96		09/25/96	NO		P
	REPORTS 1994 GROUNDWATER MONITORING REPORTS FOR THE THIRD QUARTER 1994 EVENT							
MSW	MSW -000000249-RP VOL: 026	00236310	09/25/96		09/25/96	NO		P
	REPORTS 1994 FLEXIBLE MEMBRANE LINER EVALUATION REPORT AMENDMENT C							
MSW	MSW -000000249-RP VOL: 027	00236311	09/25/96		09/25/96	NO		P
	REPORTS 1994 SUBTITLE D SUBMITTAL AMENDMENT C							
MSW	MSW -000000249-RP VOL: 028	00236312	09/25/96		09/25/96	NO		P
	REPORTS 1994 1994 ANNUAL EARTH ELECTRICAL RESISTIVITY SURVEY							
MSW	MSW -000000249-RP VOL: 029	00236313	09/25/96		09/25/96	NO		P
	REPORTS 1995 GROUNDWATER SAMPLING AND ANALYSIS PLAN AMENDMENT C							
MSW	MSW -000000249-RP VOL: 030	00236314	09/25/96		09/25/96	NO		P
	REPORTS 1995 PERMIT MODIFICATION CELLS WD-1,2, AND 3 AMENDMENT C							
MSW	MSW -000000249-RP VOL: 031	00236315	09/25/96		09/25/96	NO		P
	REPORTS 1995 DELIVERY ORDER 21 SUMU CLOSURES AMENDMENT C							

PAGE: 134

ACTIVE RECORD DETAIL REPORT
TEXAS NATURAL RESOURCE CONSERVATION COMM

DATE: 04/23/98

TIME: 15:07:57

DEPT. CODE	RECORD IDENTIFICATION	REF. ID	CREATION DATE	EVENT DATE	SUBMIT DATE	VITAL REC.	RETENTION PERIOD	MEDIA CODE
MSW	MSW -000000249-RP VOL: 032	00236316	09/25/96		09/25/96	NO		P
	REPORTS 1995 ALTERNATE LINER DESIGN DEMONSTRATION AMENDMENT C							
MSW	MSW -000000249-RP VOL: 033	00236317	09/25/96		09/25/96	NO		P
	REPORTS 1995 SOIL AND LINER QUALITY CONTROL PLAN AMENDMENT C							
MSW	MSW -000000249-RP VOL: 034	00236318	09/25/96		09/25/96	NO		P
	REPORTS 1995 SOIL AND LINER QUALITY CONTROL PLAN AMENDMENT C							
MSW	MSW -000000249-RP VOL: 035	00236319	09/25/96		09/25/96	NO		P
	REPORTS 1995 1995 ANNUAL EARTH ELECTRICAL RESISTIVITY SURVEY							
SW	MSW -000000249-RP VOL: 036	00236320	09/25/96		09/25/96	NO		P
	REPORTS 1995 LINER EVALUATION REPORT CELL WD-1 AMENDMENT C							
MSW	MSW -000000249-RP VOL: 037	00236322	09/25/96		09/25/96	NO		P
	REPORTS 1995 SPECIAL WASTE AMENDMENT C							
MSW	MSW -000000249-RP VOL: 038	00237482	10/07/96		10/07/96	NO		P
	REPORTS 1996 PHASE I SUBSURFACE EVALUATION AMENDMENT C							
MSW	MSW -000000249-RP VOL: 039	00236324	09/25/96		09/25/96	NO		P
	REPORTS 1996 GROUNDWATER MONITORING REPORTS AMENDMENT C							
MSW	MSW -000000249-RP VOL: 040	00236323	12/06/96		12/06/96	NO		P
	REPORTS 1996 CLASS I PERMIT MODIFICATION REQUEST FINAL LANDFILL CONTOURS AND DRAINAGE SYSTEM MODIFICATION							
SW	MSW -000000249-RP VOL: 041	00236331	09/25/96		09/25/96	NO		P
	REPORTS 1996 APPENDIX E —SPECIAL WASTE AMENDMENT C							

PAGE: 135

ACTIVE RECORD DETAIL REPORT
TEXAS NATURAL RESOURCE CONSERVATION COMM

DATE: 04/23/98
TIME: 15:07:59

DEPT. CODE	RECORD IDENTIFICATION	REF. ID	CREATION DATE	EVENT DATE	SUBMIT DATE	VITAL REC.	RETENTION PERIOD	MEDIA CODE
MSW	MSW -000000249-RP VOL: 042	00240823	11/06/96		11/06/96	NO		P
	REPORTS 1996 GROUNDWATER MONITORING REPORTS THIRD QUARTER 1996 SECOND BACKGROUND EVENT							
MSW	MSW -000000249-RP VOL: 043	00242773	12/02/96		12/02/96	NO		P
	REPORTS 1996 SPECIAL WASTER AUTHORIZED							
MSW	MSW -000000249-RP VOL: 044	00243325	12/09/96		12/09/96	NO		P
	REPORTS 1996 SPECIAL WASTES APPENDIX E							
MSW	MSW -000000249-RP VOL: 045	00247266	01/21/97		01/21/97	NO		P
	REPORTS 1996 ANNUAL EARTH ELECTRICAL RESISTIVITY SURVEY AMENDMENT C							
MSW	MSW -000000249-RP VOL: 046	00247984	01/28/97		01/28/97	NO		P
	REPORTS 1997 GROUND WATER MONITORING REPORTS FOURTH QUARTER 1996\THIRD BACKGROUND EVENT							
MSW	MSW -000000249-RP VOL: 047	00250028	02/21/97		02/21/97	NO		P
	REPORTS 1997 REVISION OF SOIL ESTIMATE FOR FILE NO. 0735-96 AMENDMENT C							
MSW	MSW -000000249-RP VOL: 048	00253065	05/06/97		05/06/97	NO		P
	REPORTS 1997 GROUND WATER MONITORING REPORTS FIRST QUARTER 1997//FOURTH BACKGROUND EVENT							
MSW	MSW -000000249-RP VOL: 049	00256786	07/01/97		07/01/97	NO		P
	REPORTS 1997 SITE OPERATING PLAN —REVISED AMENDMENT C							
MSW	MSW -000000249-RP VOL: 050	00260228	08/27/97		08/27/97	NO		P
	REPORTS 1997 GROUNDWATER MONITORING REPORTS-SECONO QUARTER 1997/ FIFTE BACKGROUND EVENT							
MSW	MSW -000000249-RP VOL: 051	00264994	10/22/97		10/22/97	NO		P
	REPORTS 1997 LINER EVALUATION REPORT :CELL WD-2 AMENDMENT C							

PAGE: 136

ACTIVE RECORD DETAIL REPORT
TEXAS NATURAL RESOURCE CONSERVATION COMM

DATE: 04/23/98

TIME: 15:08:02

DEPT. CODE	RECORD IDENTIFICATION	REF. ID	CREATION DATE	EVENT DATE	SUBMIT DATE	VITAL REC.	RETENTION PERIOD	MEDIA CODE
MSW	MSW -000000249-RP VOL: 052	00267510	11/06/97		11/06/97	NO		P
	SOIL AND LINER QUALITY CONTROL PLAN REV.2B,AND THE CELL WD 2 LINER EVALUATION REPORT 9/22/1997							
MSW	MSW -000000249-RP VOL: 053	00267930	11/14/97		11/14/97	NO		P
	1997 REPORT SOIL AND LINER QUALITY CONTROL PLAN OCT/95 REV. 11/1/97 REV.2B 9/97 FINAL APPROVAL 11/6/97							
MSW	MSW -000000250-CO VOL: 001	00203239	07/11/95		07/11/95	NO		P
	CORRESPONDENCE 1986 -							
MSW	MSW -000000251-CO VOL: 001	00203240	07/11/95		07/11/95	NO		P
	CORRESPONDENCE 1989 -							
MSW	MSW -000000252-CO VOL: 001	00203241	07/11/95		07/11/95	NO		P
	CORRESPONDENCE 1977 -							
MSW	MSW -000000252-MA VOL: 001	00203242	07/11/95		07/11/95	NO		P
	MAPS 1976 -							
MSW	MSW -000000253-CO VOL: 001	00203244	07/11/95		07/11/95	NO		P
	CORRESPONDENCE 1991 -							
MSW	MSW -000000254-CO VOL: 001	00203245	07/11/95		07/11/95	NO		P
	CORRESPONDENCE 1976 -							
MSW	MSW -000000255-CO VOL: 001	00203246	07/11/95		07/11/95	NO		P
	CORRESPONDENCE 1974 -							
MSW	MSW -000000256-CO VOL: 001	00203247	07/11/95		07/11/95	NO		P
	CORRESPONDENCE 1992 -							

BFI LandfillMSW - PA# 1447 - Brown, Ferris, Inc., Travis Co.Sheet 1

1. Permit 1447 (11/19/82) and supporting documents including permit application and comments from other agencies

Sheet 2

1. Additional Permit supporting documents, including:
 - A. Review letters
 - B. Notice for Filing
 - C. Discovery Schedule
 - D. Application Amendments
 - E. Engineering Report Corrections

Sheet 3

1. Additional Permit supporting documents, including:
 - A. Engineering Report corrections
 - B. TDH Permit checklist
 - C. Correspondence
 - D. TDH Site Inspection Report (5/29/81)
 - E. Trench & Soils data
 - F. Site Evaluation checklist (5/29/81)
 - E. Classification checklist (6/12/81)
 - F. Land Use Elements Report (6/24/81)

Sheet 4

1. Additional Permit supporting documents, including:
 - A. Land Use Elements Report (con't)
 - B. Option Agreement (7/30/81)
 - C. Survey Notes
 - D. Document Evidence Listing (6/25/81)

Sheet 5

1. Additional Permit Supporting Documents, including:
 - A. Correspondence
 - B. Permit Review Comments
 - C. Brief in support of Permit Application (7/29/81)
 - C. Barn the Dump Committees Brief (7/31/81)
 - D. Applicants reply Brief
 - E. TDH Proposal for Decision (8/21/81)
 - F. Soil Interpretation and Vegetation Establishment And Management Report (8/7/81)

Sheet 6

1. Additional Permit Supporting Documents, including:
 - A. Soil Interpretation ... (con't)
 - B. TDH Memos to file
 - C. Ban the Dump Committee - Exceptions to proposal for decision (9/11/81)
 - D. Correspondence
 - E. Applicants Reply to Exceptions to Proposal for decision (10/7/81)
 - F. TDH Inter-Office Memo
 - E. Permit - I Special Provision (10/20/81)
 - F. Surveyors Notes
 - G. Finding of Fact
 - H. Motion of Rehearing (11/2/81)
 - G. Applicants reply to Motion for Rehearing (11/12/81)
 - H. Order of Witnesses
 - G. Appeal to TDH (12/9/81)

Sheet 7

1. Permit Supporting Documents, including:
 - A. Motion for Rehearing (11/2/81)
 - B. Preconstruction Meeting (12/11/81)
 - C. Correspondence
 - D. Citation of TDH (12/11/81)
 - E. Permit 1447 (10/20/81)
 - F. Site Work Specifications (12/10/81)

Sheet 8

1. Permit Supporting Documents, including:
 - A. Reply to Appeal to the Board of the TDH (12/21/81)
 - B. TDH Board Meeting Minutes (5/21/78)
 - C. Correspondence
 - D. Permit Review
 - E. TDH Memo's to File
 - F. Groundwater Monitoring (2/5/82)* & (6/21/81)*
 - G. TDH Site Visit Memo
 - H. Soils & Liner Evaluation Report (SLER) (4/21/82)

Sheet 9

1. Permits Supporting Documents, including:
 - A. SLER (cont)
 - B. Correspondence
 - C. TDH Site Inspection Report (4/15/82)
 - D. Field Inspection Reports (4/23/82)

Sheet 10

1. Field Inspection Reports (cont)
2. Correspondence
3. Letter on Disposal of Special Waste (6/18/82)*
4. Well Sampling Results (7/21/82)
5. SLER (8/6/82)

Sheet 11

1. Groundwater Sampling (8/30/82)
2. Correspondence
3. Groundwater Sampling (8/5/82)*
4. TDH Site Inspection Reports (8/17/82) (10/26/82)

Sheets 12 & 13

1. SLER (9/24/82)
2. Correspondence
3. Letter of Credit (2/3/82)
4. Groundwater Monitoring Reports (1/24/83)* (9/20/83)*
5. SLERs (1/28/83) (4/12/83) (7/25/83) (11/23/83)
6. TDH Site Inspection Reports (4/6/83) (5/11/83)

Sheet 14

1. SLER (11/23/83) (1/30/84) (5/10/84)
2. TDH Inspection Reports (11/16/83) (5/1/84)
3. Correspondence
4. Telephone Complaint to TDH (2/8/84)
5. GW report (3/5/84)*

Sheet 15

1. TDH Site Inspection Report (5/23/84) (11/9/84)
2. Correspondence
3. SLER (7/24/84) (11/26/84)
4. GW Monitoring Plan (8/22/84)
5. TDH Notice of Compliance (2/4/85)

Sheet 16

1. Correspondence
2. TDH Interoffice Memos

3. SLER (3/12/85) (4/10/85) (7/17/85)
4. Groundwater Monitoring Report (3/25/85)*
5. TDH Notice of Compliance (4/18/85)
6. TDH Inspection Report (3/27/85)

Sheet 17

1. TDH Notice of Compliance (7/26/85)
2. TDH Inspection Report (7/10/85) (10/22/85) (1/7/86)
3. TDH Authorization of Contaminated Soil Disposal (8/6/85)*
4. TDH Interoffice Memos
5. Permit Bonds
6. Groundwater Monitoring Report (10/16/85)*
7. Correspondence
8. SLER (11/2/83)
9. Raba-Kistner to TDH - Well replacment (11/21/85)*

Sheet 18

1. Earth Electrical Resistivity Survey (5/5/86)
2. Correspondence

Sheet 19

1. SLER (1/9/86)
2. Groundwater Monitoring Report (3/5/86)*
3. TDH Inspection Report (4/8/86)

Sheet 20

1. Correspondence
2. Spec'd Water Authorization (8/1/86)
- Tracor Soil

Sheet 21

1. URM Tracor Soil Report (4/17/86)
2. URM Tracor Closure Plan (4/31/86)
3. URM Denial of Tracor Soil Disposal (8/1/86)
4. Correspondence

Sheet 22

1. SLQCP (7/9/86)
2. Groundwater Monitoring Report (8/20/86)*
3. TDH Inspection Report (7/24/86)
4. TDH Interoffice Memos
5. TDH Correspondence

Sheet 23

1. TDH Inspections Field Report (10/16/86)
2. TDH Interoffice Memos
3. TDH Correspondence

Sheet 24

1. Groundwater Monitoring Report (3/4/87)
2. SLER (3/11/87)
3. TDH Interoffice Memos
4. Letters of Credit
5. TDH Correspondence
6. TDH Inspectors Field Report (4/8/87)
7. Annual EERS (4/27/87)

Sheet 25

1. TDH Correspondence - Spec'd Waste (Flint Abrasive) (6/22/87)
2. TDH Interoffice Memos
3. TDH Inspectors Field Report (7/29/87)

Sheet 26

1. Groundwater Monitoring Report (9/8/87)*
2. TDH Correspondence
3. SLER (9/24/87)

Sheet 27

1. TDH Interoffice Memos
2. Permit Bond
3. TDH Correspondence
4. TDH Inspectors Field Report (11/24/87)

Sheet 28

1. Listing of Disposal Projs

Sheet 29

1. Listing of Disposal Projs
2. TDH Correspondence
3. Groundwater Sampling Notice (1/29/88)*
4. TDH Inspectors Field Report (2/9/88)
5. TDH Interoffice Memos
6. Permit Bond

Sheet 30

1. TDH Correspondence
2. Groundwater Monitoring Report (2/29/88)*
3. TWC Correspondence

Sheet 31

1. SLER (6/17/88)
2. TDH Correspondence
3. TDH Inspector's Field Report (6/22/88)
4. Quality Control and Operation Plan (7/27/88)
for disposal of special wastes
5. Notice of P&A of Well No. 6 (7/28/88)

Sheet 32

1. TDH Correspondence
2. TDH Interoffice Memo
3. Groundwater Monitoring Report (8/17/88)*
4. MW-6 Plugging Report (8/25/88)
5. EERS (9/20/88)
6. TDH Inspectors Field Report (9/21/88)

Sheet 33

1. SLER (10/17/88)
2. TDH Interoffice Memo
3. TDH Correspondence

Sheet 34

1. TDH Inspectors Field Report (12/21/88)

Sheet 35

1. Annual Groundwater Review (3/89)*
2. Waste Acceptance Plan - Lincoln Properties Project (3/8/89)
3. Correspondence
4. Freeman Chemical Form Classification (3/15/89)
5. TDH Inspectors Field Report (3/23/89)

Sheet 36

1. Monthly Waste Receipt Summary (3/89) (4/89) (8/89) (6/89)
2. SLER (4/10/89)
3. TDH Inspectors Field Report (7/12/89)

Sheet 37

1. Annual Groundwater Review (9/7/89)

Sheet 38

1. Annual Groundwater Review (9/7/89)
2. Monthly Waste Receipt Summary (8,9,10,11,12/89)
3. TDH Interoffice Memo
4. Groundwater Monitoring Report (10/31/89)
5. TDH Correspondence

6. TDH Inspectors Field Report (10/24/89) (1/23/90)

Sheet 39

1. Memo on Disposal of Contaminated Construction Material
Katy Lane (2/22/90)
2. Air Sampling Results - Residence (9/28/89)
3. Annual Groundwater Review (2/2/90)

Sheet 40

1. Annual Groundwater Review (2/2/90)

Sheet 41

1. Request for Disposal of Hydraulic Oil contaminated soil (2/9/90)
2. TDH Correspondence
3. Monthly Waste Receipt Summary (2,3/90)
4. Request to Dispose Waste Oil affected soil (4/4/90)
5. Requests for Disposal (4/26/90)

Sheet 42

1. SLER (4/29/90)
2. Monthly Waste Receipt Summary (4,5,6,7/90)
3. Waste Disposal Requests (6/5/90) (7/23/90) (3/8/89) (8/3/90) (8/15/90)
4. TDH Inspectors Field Report (5/17/90)

Sheet 43

1. Waste Disposal Requests (8/15/90) (9/7/90)

Sheet 44

Sheet 45

1. Annual Groundwater Review (9/17/90)
2. Monthly Waste Receipt Summary (8,9/90)
3. TDH Inspection Field Report (9/17/90)
4. Waste Disposal Requests (10/8/90)
5. SLER (10/21/90)

Sheet 46

1. Waste Disposal Requests (10/29/90) (10/24/90) (10/26/90)
2. Insurance Certificate
3. Monthly Water Receipt Summary (10/90)
4. TDH Correspondence
5. Quarterly Summary Report (2nd 1990)
6. Resistivity Studies (10/3/90)

Sheet 47

1. Resistivity Studies (cont)
2. Monthly Waste Receipt Study (11,12/90)
3. Disposal Request (12/9/90) (2/8/91) (1/29/91)
4. TDH Correspondence
5. TDH Inspectors Field Report (12/20/90)

Sheet 48

1. Waste Stabilization Report
2. Disposal Request (9/26/90)
3. Quarterly Summary Report (4th 1990)
4. Monthly Waste Receipt Summary

Sheet 49

1. Annual Groundwater Review (2/27/91)
2. TDH Correspondence
3. SLER (3/1/91)

Sheet 50

1. Annual Groundwater Review (2/27/91)
2. Monthly Waste Receipt Summary
3. Groundwater Monitoring Report (4/12/91)
4. Disposal Requests (4/26/91) (4/11/91) (5/10/91)
5. TDH Inspectors Field Report (5/7/91)
6. Quarterly Summary Report - 1st Quarter (3/27/91)

Sheet 51

1. Disposal Requests (5/17/91) (5/10/91) (5/31/91) (6/11/91)
2. TDH Inspectors Field Report (5/24/91)
3. Monthly Waste Receipt Summary

Sheet 52

1. Earth Electrical Resistivity Survey (5/91)
2. Monthly Waste Receipt Summary (6,7/91)
3. Quarterly Report (2nd 1991)

Sheet 53

1. Waste Authorization (8/21/91)
2. Monthly Waste Receipt Summary (8,9/91)
3. Waste Authorization (8/21/91)

Sheet 54

1. Quality Control Plan (8/1/91)
2. Inspectors Field Report (9/26/91)
3. Monthly Waste Receipt Summary

4. Waste Authorization (11/13/91)
5. Groundwater Monitoring (11/13/91)
6. TDH Correspondence
7. Quarterly Report (3rd 1991)

r.

Sheet 55

1. SLER (12/2/91)
2. Monthly Waste Receipt Survey (12/92)

Sheet 56

1. Resistivity Survey (1/31/92)
2. Quality Control Plan for Acceptance of used or scrap whole tires (12/31/91)
3. Monthly Waste Receipt Summary
4. Groundwater Sampling (2/26/92)
5. TDH Reply

Sheet 57

1. Groundwater Monitoring (3/9/92)
2. Monthly Waste Receipt Summary (3,4,5,6,8/92)
3. TDH Correspondence

Sheet 58

1. 1992 Earth Resistivity Survey (5/4/92)
2. TDH Special Waste Denial (5/13/92)
3. Groundwater Monitoring (5/29/92)
4. TDH Correspondence

Sheet 59

1. Soil Analytical (6/15/92) for Disposal
2. Soil Disposal Request (5/11/92)

Sheet 60

1. Soil Disposal Request (5/11/92)
2. SLER (6/28/92)

Sheet 61

1. Waste Characterization (5/11/92) (5/20/92)

Sheet 62

1. SLER (7/9/92)
2. TDH Inspectors Field Report (6/8/92)
3. Waste Approval (7/28/92) (7/29/92)
4. Groundwater Monitoring Report (7/28/92)

Sheet 63

1. Waste Approval (cont)
2. Semi-Annual GW Monitoring Report (8/28/92)

Sheet 64

1. Semi-Annual GW Monitoring Report (8/28/92)

Sheet 65

1. Semi-Annual GW Monitoring Report (8/28/92)

Sheet 66

1. Semi-Annual GW Monitoring Report (8/28/92)

Sheet 67

1. Semi-Annual GW Monitoring Report (8/28/92)
2. Waste Approval (9/10/92) (10/26/92)
3. TDH Correspondence
4. Extension Certificate

BFI INDEX

PAGE: 11

ACTIVE RECORD DETAIL REPORT
TEXAS NATURAL RESOURCE CONSERVATION COMMDATE: 04/24/98
TIME: 08:13:10

DEPT. CODE	RECORD IDENTIFICATION	REF. ID	CREATION DATE	EVENT DATE	SUBMIT DATE	VITAL REC.	RETENTION PERIOD	MEDIA CODE
MSW	MSW -000001446-RP VOL: 015	00280845	04/09/98		04/09/98	NO		P
	REPORT 1998 RESISTIVITY SURVEY REPORT							
MSW	MSW -000001446-TR VOL: 001	00214203	08/28/95		08/28/95	NO		P
	TRANSCRIPT 1982 BEFORE THE TEXAS DEPARTMENT OF HEALTH APPLICATION VOLUME I AND VI							
MSW	MSW -000001447-CO VOL: 001	00214184	08/25/95		08/25/95	NO		P
	CORRESPONDENCE 1991 - 1992							
MSW	MSW -000001447-CO VOL: 002	00214185	08/25/95		08/25/95	NO		P
	CORRESPONDENCE 1993							
MSW	MSW -000001447-CO VOL: 003	00214186	08/25/95		08/25/95	NO		P
	CORRESPONDENCE 1/1994 - 8/1994							
MSW	MSW -000001447-CO VOL: 004	00214187	08/25/95		08/25/95	NO		P
	CORRESPONDENCE 9/1994 - 12/1994							
MSW	MSW -000001447-CO VOL: 005	00214188	08/25/95		08/25/95	NO		P
	CORRESPONDENCE 1/1995 - 6/1995							
MSW	MSW -000001447-CO VOL: 006	00214189	08/25/95		08/25/95	NO		P
	CORRESPONDENCE 7/1995 -							
MSW	MSW -000001447-CO VOL: 007	00230858	08/25/95		08/25/95	NO		P
	CORRESPONDENCE 10/1995 - 2/1996							
MSW	MSW -000001447-CO VOL: 008	00230859	12/13/96		12/13/96	NO		P
	CORRESPONDENCE 1996							

PAGE: 12

ACTIVE RECORD DETAIL REPORT
TEXAS NATURAL RESOURCE CONSERVATION COMM

DATE: 04/24/98

TIME: 08:13:11

DEPT. CODE	RECORD IDENTIFICATION	REF. ID	CREATION DATE	EVENT DATE	SUBMIT DATE	VITAL REC.	RETENTION PERIOD	MEDIA CODE
MSW	MSW -000001447-CO VOL: 009	00240545	04/16/97		04/16/97	NO		P
	CORRESPONDENCE 08/28/1996--12/31/1996							
MSW	MSW -000001447-CO VOL: 010	00252157	07/16/97		07/16/97	NO		P
	CORRESPONDENCE 01/15/97--2/28/97							
MSW	MSW -000001447-CO VOL: 011	00257741	07/16/97		07/16/97	NO		P
	CORRESPONDENCE 5/1/97--12/16/97							
MSW	MSW -000001447-CO VOL: 012	00281075	04/15/98		04/15/98	NO		P
	CORRESPONDENCE 1998 01/19/98 --							
MSW	MSW -000001447-EX VOL: 001	00214208	08/28/95		08/28/95	NO		P
	EXHIBITS 1981 - HEARINGS NO. 1							
MSW	MSW -000001447-EX VOL: 002	00214209	08/28/95		08/28/95	NO		P
	EXHIBITS 1981 -							
MSW	MSW -000001447-EX VOL: 003	00214210	08/28/95		08/28/95	NO		P
	EXHIBITS 1982 - BREIFs							
MSW	MSW -000001447-MA VOL: 001	00214179	08/25/95		08/25/95	NO		P
	MAPS 1981 - 1 OF 2							
MSW	MSW -000001447-MA VOL: 002	00214180	08/25/95		08/25/95	NO		P
	MAPS 1981 - 2 OF 2							
MSW	MSW -000001447-RP VOL: 001	00214136	08/25/95		08/25/95	NO		P
	REPORTS 1981 SITE PERMIT APPLICATION / VOL 1 OF 2							

PAGE: 13

ACTIVE RECORD DETAIL REPORT
TEXAS NATURAL RESOURCE CONSERVATION COMM

DATE: 04/24/98

TIME: 08:13:12

DEPT. CODE	RECORD IDENTIFICATION	REF. ID	CREATION DATE	EVENT DATE	SUBMIT DATE	VITAL REC.	RETENTION PERIOD	MEDIA CODE
MSW	MSW -000001447-RP VOL: 002	00214137	08/25/95		08/25/95	NO		P
	REPORTS 1981 SITE PERMIT APPLICATION / VOL 2 OF 2							
MSW	MSW -000001447-RP VOL: 003	00214139	08/25/95		08/25/95	NO		P
	REPORTS 1992 OCTOBER 1992 EARTH ELECTRICAL RESISTIVITY SURVEY							
MSW	MSW -000001447-RP VOL: 004	00214143	08/25/95		08/25/95	NO		P
	REPORTS 1993 SOIL AND LINER EVALUATION REPORT / ACCEPTANCE							
MSW	MSW -000001447-RP VOL: 005	00214147	08/25/95		08/25/95	NO		P
	REPORTS 1993 SOIL AND LINER EVALUATION REPORT / ACCEPTANCE							
MSW	MSW -000001447-RP VOL: 006	00214153	08/25/95		08/25/95	NO		P
	REPORTS 1993 ANALYTICAL REPORT / SEMI-ANNUAL GROUNDWATER ANALYSIS							
MSW	MSW -000001447-RP VOL: 007	00214154	08/25/95		08/25/95	NO		P
	REPORTS 1993 AUTHORIZATION TO ACCEPT CONTAMINATED SOIL							
MSW	MSW -000001447-RP VOL: 008	00214155	08/25/95		08/25/95	NO		P
	REPORTS 1993 SOIL AND LINER EVALUATION REPORT ACCEPTANCE							
MSW	MSW -000001447-RP VOL: 009	00214156	08/25/95		08/25/95	NO		P
	REPORTS 1994 GROUNDWATER MONITORING							
MSW	MSW -000001447-RP VOL: 010	00214157	08/25/95		08/25/95	NO		P
	REPORTS 1994 GROUNDWATER MONITORING DATA							
MSW	MSW -000001447-RP VOL: 011	00214158	08/25/95		08/25/95	NO		P
	REPORTS 1994 JANUARY 1994 EARTH ELECTRICAL RESISTIVITY SURVEY							

PAGE: 14

ACTIVE RECORD DETAIL REPORT
TEXAS NATURAL RESOURCE CONSERVATION COMM

DATE: 04/24/98

TIME: 08:13:14

DEPT. CODE	RECORD IDENTIFICATION	REF. ID	CREATION DATE	EVENT DATE	SUBMIT DATE	VITAL REC.	RETENTION PERIOD	MEDIA CODE
MSW	MSW -000001447-RP VOL: 012	00214159	08/25/95		08/25/95	NO		P
	REPORTS 1994 GROUNDWATER MONITORING DATA							
MSW	MSW -000001447-RP VOL: 013	00214164	08/25/95		08/25/95	NO		P
	REPORTS 1994 GROUNDWATER SAMPLING AND ANALYSIS PLAN							
MSW	MSW -000001447-RP VOL: 014	00214160	08/25/95		08/25/95	NO		P
	REPORTS 1994 SUBTITLE D UPGRADE PERMIT MODIFICATION / CLASS 1 PERMIT MODIFICATION							
MSW	MSW -000001447-RP VOL: 015	00214161	08/25/95		08/25/95	NO		P
	REPORTS 1994 SITE DEVELOPMENT PLAN NARRATIVE							
MSW	MSW -000001447-RP VOL: 016	00214163	08/25/95		08/25/95	NO		P
	REPORTS 1994 ANALYTICAL REPORT / SEMI-ANNUAL GROUNDWATER ANALYSIS							
MSW	MSW -000001447-RP VOL: 017	00214165	08/25/95		08/25/95	NO		P
	REPORTS 1994 TNRCC STANDARD EXEMPTION APPLICATION							
MSW	MSW -000001447-RP VOL: 018	00214166	08/25/95		08/25/95	NO		P
	REPORTS 1995 QUALITY ASSURANCE OF CLAY LINER CONSTRUCTION							
MSW	MSW -000001447-RP VOL: 019	00214167	08/25/95		08/25/95	NO		P
	REPORTS 1995 QUALITY ASSURANCE OF GEOMEMBRANE LINER INSTALLATION PHASE 1, STATION 13+00 - 17+00							
MSW	MSW -000001447-RP VOL: 020	00214168	08/25/95		08/25/95	NO		P
	REPORTS 1995 GROUNDWATER MONITORING DATA							
MSW	MSW -000001447-RP VOL: 021	00214169	08/25/95		08/25/95	NO		P
	REPORTS 1995 GROUNDWATER SAMPLING AND ANALYSIS PLAN REVISION							

PAGE: 15

ACTIVE RECORD DETAIL REPORT
TEXAS NATURAL RESOURCE CONSERVATION COMM

DATE: 04/24/98
TIME: 08:13:15

DEPT. CODE	RECORD IDENTIFICATION	REF. ID	CREATION DATE	EVENT DATE	SUBMIT DATE	VITAL REC.	RETENTION PERIOD	MEDIA CODE
MSW	MSW -000001447-RP VOL: 022	00214170	08/25/95		08/25/95	NO		P
	REPORTS 1995 ANALYTICAL REPORT / SEMI-ANNUAL GROUNDWATER ANALYSIS							
MSW	MSW -000001447-RP VOL: 023	00230854	08/25/95		08/25/95	NO		P
	REPORT 1995 PIEZOMETER INSTALLATION							
MSW	MSW -000001447-RP VOL: 024	00230855	08/25/95		08/25/95	NO		P
	REPORT 1995 QUALITY ASSURANCE OF CLAY LINER CONSTRUCTION							
MSW	MSW -000001447-RP VOL: 025	00230856	08/25/95		08/25/95	NO		P
	REPORT 1995 QUALITY ASSURANCE OF GEOMEMBRANE CONSTRUCTION							
SW	MSW -000001447-RP VOL: 026	00230857	08/25/95		08/25/95	NO		P
	REPORT 1996 ANALYTICAL REPORT SEMI-ANNUAL GROUNDWATER ANALYSIS							
MSW	MSW -000001447-RP VOL: 027	00233203	08/20/96		08/20/96	NO		P
	REPORT 1996 QUALITY ASSURANCE OF GEOMEMBRANE INSTALLATION PHASE 1, SECTORS 5 AND 6							
MSW	MSW -000001447-RP VOL: 028	00251787	04/07/97		04/07/97	NO		P
	REPORT 1996 SWMU 13 SOIL ANALYTICAL DATA AND MONITORING WELL 01307MW, SM18GW, AND SM20GW GROUNDWATER ANALYTICAL DATA							
MSW	MSW -000001447-RP VOL: 029	00251788	04/07/97		04/07/97	NO		P
	REPORT 1996 SWMU 13 SOIL ANALYTICAL DATA AND MONITORING WELL 01307MW, SM18GW, AND SM20GW GROUNDWATER ANALYTICAL DATA							
MSW	MSW -000001447-RP VOL: 030	00233555	04/07/97		04/07/97	NO		P
	REPORT 1996 APPENDIX B BULK LIQUIDS WASTES							
W	MSW -000001447-RP VOL: 031	00233696	04/07/97		04/07/97	NO		P
	REPORT 1996 ANALYTICAL REPORT SEMI-ANNUAL GROUNDWATER ANALYSIS							

PAGE: 16

ACTIVE RECORD DETAIL REPORT
TEXAS NATURAL RESOURCE CONSERVATION COMM

DATE: 04/24/98
TIME: 08:13:16

DEPT. CODE	RECORD IDENTIFICATION	REF. ID	CREATION DATE	EVENT DATE	SUBMIT DATE	VITAL REC.	RETENTION PERIOD	MEDIA CODE
MSW	MSW -000001447-RP VOL: 032	00236261	04/07/97		04/07/97	NO		P
	REPORT 1996 QUALITY ASSURANCE OF GEOMEMBRANE INSTALLATION PHASE 1, SECTORS 5 AND 6							
MSW	MSW -000001447-RP VOL: 033	00240526	04/07/97		04/07/97	NO		P
	REPORT 1996 ADDITIONAL INFORMATION FOR AUTHORIZATION FOR DISPOSAL OF SPECIAL WASTE							
MSW	MSW -000001447-RP VOL: 034	00243273	04/07/97		04/07/97	NO		P
	REPORT 1996 SPECIAL WASTES APPENDIX E							
MSW	MSW -000001447-RP VOL: 035	00242335	04/07/97		04/07/97	NO		P
	REPORT 1996 AUTHORIZATION FOR SPECIAL WASTE							
MSW	MSW -000001447-RP VOL: 036	00246385	04/07/97		04/07/97	NO		P
	REPORT 1996 APPENDIX E SPECIAL WASTE							
MSW	MSW -000001447-RP VOL: 037	00250045	04/07/97		04/07/97	NO		P
	REPORT 1997 APPENDIX BI BULK LIQUID WASTES							
MSW	MSW -000001447-RP VOL: 038	00250670	04/07/97		04/07/97	NO		P
	REPORT 1997 ANALYTICAL REPORT — SEMI-ANNUAL GROUNDWATER ANALYSIS : SAMPLED JANUARY 28-30, 1997							
MSW	MSW -000001447-RP VOL: 039	00251513	04/07/97		04/07/97	NO		P
	REPORT 1997 APPENDIX A--- PETROLEUM SUBSTANCE CONTAMINATED SOILS							
MSW	MSW -000001447-RP VOL: 040	00251687	04/07/97		04/07/97	NO		P
	REPORT 1997 APPENDIX E---SPECIAL WASTE							
MSW	MSW -000001447-RP VOL: 041	00251784	04/07/97		04/07/97	NO		P
	REPORT 1997 APPENDIX E---SPECIAL WASTE							

PAGE: 17

ACTIVE RECORD DETAIL REPORT
TEXAS NATURAL RESOURCE CONSERVATION COMM

DATE: 04/24/98

TIME: 08:13:17

DEPT. CODE	RECORD IDENTIFICATION	REF. ID	CREATION DATE	EVENT DATE	SUBMIT DATE	VITAL REC.	RETENTION PERIOD	MEDIA CODE
MSW	MSW -000001447-RP VOL: 042	00251785	04/07/97		04/07/97	NO		P
	REPORT 1997 APPENDIX E---SPECIAL WASTE							
MSW	MSW -000001447-RP VOL: 043	00251720	04/07/97		04/07/97	NO		P
	REPORT 1997 APPENDIX E---SPECIAL WASTE							
MSW	MSW -000001447-RP VOL: 044	00251721	04/07/97		04/07/97	NO		P
	REPORT 1997 APPENDIX E---SPECIAL WASTE							
MSW	MSW -000001447-RP VOL: 045	00253054	05/06/97		05/06/97	NO		P
	REPORT 1997 REQUEST FOR AUTHORIZATION FOR DISPOSAL OF SPECIAL WASTE							
MSW	MSW -000001447-RP VOL: 046	00260168	08/27/97		08/27/97	NO		P
	REPORT 1997 APPENDIX B---CONTAINERIZED LIQUIDS							
MSW	MSW -000001447-RP VOL: 047	00260170	08/27/97		08/27/97	NO		P
	REPORT 1997 APPENDIX E --- SPECIAL WASTES							
MSW	MSW -000001447-RP VOL: 048	00260378	09/03/97		09/03/97	NO		P
	REPORT 1997 SEMI-ANNUAL GROUNDWATER DATA DATE SAMPLED 7/1-2/97							
MSW	MSW -000001447-RP VOL: 049	00267371	11/05/97		11/05/97	NO		P
	REPORT 1997 APPENDIX E SPECIAL WASTE							
MSW	MSW -000001447-RP VOL: 050	00279855	03/19/98		03/19/98	NO		P
	REPORT 1998 GROUND WATER MONITORING DATA							
MSW	MSW -000001448-CO VOL: 001	00214221	08/28/95		08/28/95	NO		P
	CORRESPONDENCE 1992 -							

TDS Landfill

1. Permit 2123 (9/90)
2. Permit 2123 (7/89)
Monitor wells Pippel Ulmann & Assoc.
Complaint of TDS Site location
Letters to representatives
Letters to Congress
3. Permit (8/88)
Groundwater monitoring
4. Permit
5. Letter for dif. agency's review of permit (9/88)
Press Release
Notice of filing
Open dump inventory
Notice of Public Hearing
6. Resolution Travis County Commissioners Court
Environmental Analysis UT (Masters Report) (5/77)
Environmental Analysis
7. Continued (5/77)
SLER (5/91)
8. SLER - continued (5/91)
Letter re: Homeowners vs. COA & TDS
Cause #490,473
Inspection Report (5/91)
Response to letter from Citizen to Gov. Richards (3/91)
Monthly Waste Summary (6/91)
SLER (8/91)
9. SLER - continued (8/91)
Inspection - violations noted (8/91)
Hearing Environmental Committee of TDH transcript (7/91)
Response to Groups (8/91)
SLER (8/91)
10. SLER - continued (8/91)
Inspection Report (10/91)
GW Monitoring Report (11/91)
GW Monitoring Report (12/91)

GW Sampling Results (11/91)
Complaint (12/91)

11. Complaint cont'd (12/91)
12. Letter re: Recommendations for landilling - permit application (2/89)
several response letters
summary of opinion
Resolution by City of Creedmoor (opposition to landfill)
13. Continuation of above re: Permit Application
14. Press Release - Public Hearing (6/89)
re: Permit Application
15. Continuation of Permit App. (6/89)
response and countdowns
16. Hearing - Discovery Schedule (8/89)
17. Hearing (8/89)
18. Hearing (8/89)
Motion to Assess Costs
19. Supplemental Witness list (9/89)
COA Concerns
Hearing
20. Hearing (8/89)
Resolution on TX Disposal Systems Landfill
21. Hearing Interragations (9/89)
22. Hearing Interragations (9/89)
23. Hearing Interragations (9/89)
24. Hearings (10/89)
Permit App. Conclusion & opinions
25. Hearing

26. Groundwater Report
Hearing
Landuse Analysis Report

27. Hearing

TDS INDEX

PAGE: 167

ACTIVE RECORD DETAIL REPORT
TEXAS NATURAL RESOURCE CONSERVATION COMM

DATE: 04/24/98

TIME: 08:56:08

DEPT. CODE	RECORD IDENTIFICATION	REF. ID	CREATION DATE	EVENT DATE	SUBMIT DATE	VITAL REC.	RETENTION PERIOD	MEDIA CODE
MSW	MSW -000002122-EX VOL: 013	00228468	07/01/96		07/01/96	NO		P
	EXHIBIT 1989 HEARING NOTES							
MSW	MSW -000002122-RP VOL: 001	00228432	07/01/96		07/01/96	NO		P
	REPORT 1987 SANITARY LANDFILL PERMIT APPLICATION							
MSW	MSW -000002123-CO VOL: 001	00228515	06/17/97		06/17/97	NO		P
	CORRESPONDENCE 12/27/91--9/25/92							
MSW	MSW -000002123-CO VOL: 002	00228516	06/17/97		06/17/97	NO		P
	CORRESPONDENCE 10/2/92--8/30/93							
MSW	MSW -000002123-CO VOL: 003	00228518	06/17/97		06/17/97	NO		P
	CORRESPONDENCE 9/20/93--8/21/94							
MSW	MSW -000002123-CO VOL: 004	00255407	06/17/97		06/17/97	NO		P
	CORRESPONDENCE 9/07/94--12/30/94							
MSW	MSW -000002123-CO VOL: 005	00255410	06/17/97		06/17/97	NO		P
	CORRESPONDENCE 2/1/95--8/11/95							
MSW	MSW -000002123-CO VOL: 006	00255411	06/17/97		06/17/97	NO		P
	CORRESPONDENCE 9/7/95--12/19/95							
MSW	MSW -000002123-CO VOL: 007	00255412	06/17/97		06/17/97	NO		P
	CORRESPONDENCE 1/4/96--12/31/96							
MSW	MSW -000002123-CO VOL: 008	00255413	06/17/97		06/17/97	NO		P
	CORRESPONDENCE 1/24/97--							

PAGE: 168

ACTIVE RECORD DETAIL REPORT
TEXAS NATURAL RESOURCE CONSERVATION COMM

DATE: 04/24/98

TIME: 08:56:09

DEPT. CODE	RECORD IDENTIFICATION	REF. ID	CREATION DATE	EVENT DATE	SUBMIT DATE	VITAL REC.	RETENTION PERIOD	MEDIA CODE
MSW	MSW -000002123-EX VOL: 001	00228551	07/01/96		07/01/96	NO		P
	EXHIBIT 1987 - 1991 HEARING FILES							
MSW	MSW -000002123-EX VOL: 002	00232629	07/01/96		07/01/96	NO		P
	EXHIBIT 1989 HEARING FILES BOX 1							
MSW	MSW -000002123-EX VOL: 003	00233315	08/21/96		08/21/96	NO		P
	EXHIBIT 1990 JANUARY 1990 POSITION STATEMENT ON THE MUNICIPAL SOLID WASTE PROCESSING FACILITY IN TRAVIS COUNTY							
MSW	MSW -000002123-RP VOL: 001	00228527	07/01/96		07/01/96	NO		P
	REPORT 1988 GENERAL INFORMATION PART A AND B PERMIT APPLICATION FOR TYPE I							
MSW	MSW -000002123-RP VOL: 002	00233316	07/01/96		07/01/96	NO		P
	REPORT 1988 GENERAL INFORMATION PART A AND B PERMIT APPLICATION FOR TYPE I							
MSW	MSW -000002123-RP VOL: 003	00228528	07/01/96		07/01/96	NO		P
	REPORT 1992 AUTHORIZATION TO ACCEPT SPECIAL WASTE							
MSW	MSW -000002123-RP VOL: 004	00228530	07/01/96		07/01/96	NO		P
	REPORT 1994 PERFORMANCE STANDARD DESIGN CRITERIA AND BASIS TEXAS DISPOSAL SYSTEMS LANDFILL INC TYPE I MUNICIPAL							
MSW	MSW -000002123-RP VOL: 005	00228531	08/21/96		08/21/96	NO		P
	REPORT 1994 MODIFICATION OF PERMIT TO INCORPORATE REQUIREMENTS OF RCRA SUBTITLE D CRITERIA							
MSW	MSW -000002123-RP VOL: 006	00233335	08/21/96		08/21/96	NO		P
	REPORT 1994 TECHNICAL INFORMATION PART B AS REVISED TO INCORPORATE RCRA SUBTITLE D							
MSW	MSW -000002123-RP VOL: 007	00233336	08/21/96		08/21/96	NO		P
	REPORT 1994 TECHNICAL INFORMATION PART B AS REVISED TO INCORPORATE RCRA SUBTITLE D							

PAGE: 169

ACTIVE RECORD DETAIL REPORT
TEXAS NATURAL RESOURCE CONSERVATION COMM

DATE: 04/24/98

TIME: 08:56:10

DEPT. CODE	RECORD IDENTIFICATION	REF. ID	CREATION DATE	EVENT DATE	SUBMIT DATE	VITAL REC.	RETENTION PERIOD	MEDIA CODE
MSW	MSW -000002123-RP VOL: 008	00233337	08/21/96		08/21/96	NO		P
	REPORT 1994 TECHNICAL INFORMATION PART B AS REVISED TO INCORPORATE RCRA SUBTITLE D							
MSW	MSW -000002123-RP VOL: 009	00233338	08/21/96		08/21/96	NO		P
	REPORT 1994 SUPPLEMENT TO PERFORMANCE STANDARD DESIGN CRITERIA AND BASIS NORTH TEXAS MUNICIPAL WATER DISTRICT							
MSW	MSW -000002123-RP VOL: 010	00233339	08/21/96		08/21/96	NO		P
	REPORT 1994 SUPPLEMENT TO PERFORMANCE STANDARD DESIGN CRITERIA AND BASIS TEXAS DISPOSAL SYSTEMS LANDFILL INC							
MSW	MSW -000002123-RP VOL: 011	00233340	08/21/96		08/21/96	NO		P
	REPORT 1994 OCTOBER 17, 1994 RESPONSE TO TNRC COMMENTS MODIFICATION OF PERMIT TO INCORPORATE REQUIREMENTS OF RCRA							
W	MSW -000002123-RP VOL: 012	00233344	08/21/96		08/21/96	NO		P
	REPORT 1994 SLER #94-02 NOVEMBER 4 1994							
MSW	MSW -000002123-RP VOL: 013	00233350	08/21/96		08/21/96	NO		P
	REPORT 1994 SUBTITLE D PERMIT MODIFICATION							
MSW	MSW -000002123-RP VOL: 014	00233362	09/06/96		09/06/96	NO		P
	REPORT 1994 MODELING FATE & CONTAMINANT TRANSPORT OF LEACHATE FROM THE LANDFILL TO THE POINT OF COMPLIANCE							
MSW	MSW -000002123-RP VOL: 015	00233365	09/06/96		09/06/96	NO		P
	REPORT 1995 SLER #95-02 MAY 11 1995							
MSW	MSW -000002123-RP VOL: 016	00233367	09/06/96		09/06/96	NO		P
	REPORT 1995 CERTIFICATION OF COMPLIANCE WITH GROUND-WATER MONITORING REQUIREMENTS							
W	MSW -000002123-RP VOL: 017	00233372	09/06/96		09/06/96	NO		P
	REPORT 1995 GROUND-WATER SAMPLING AND ANALYSIS PLAN							

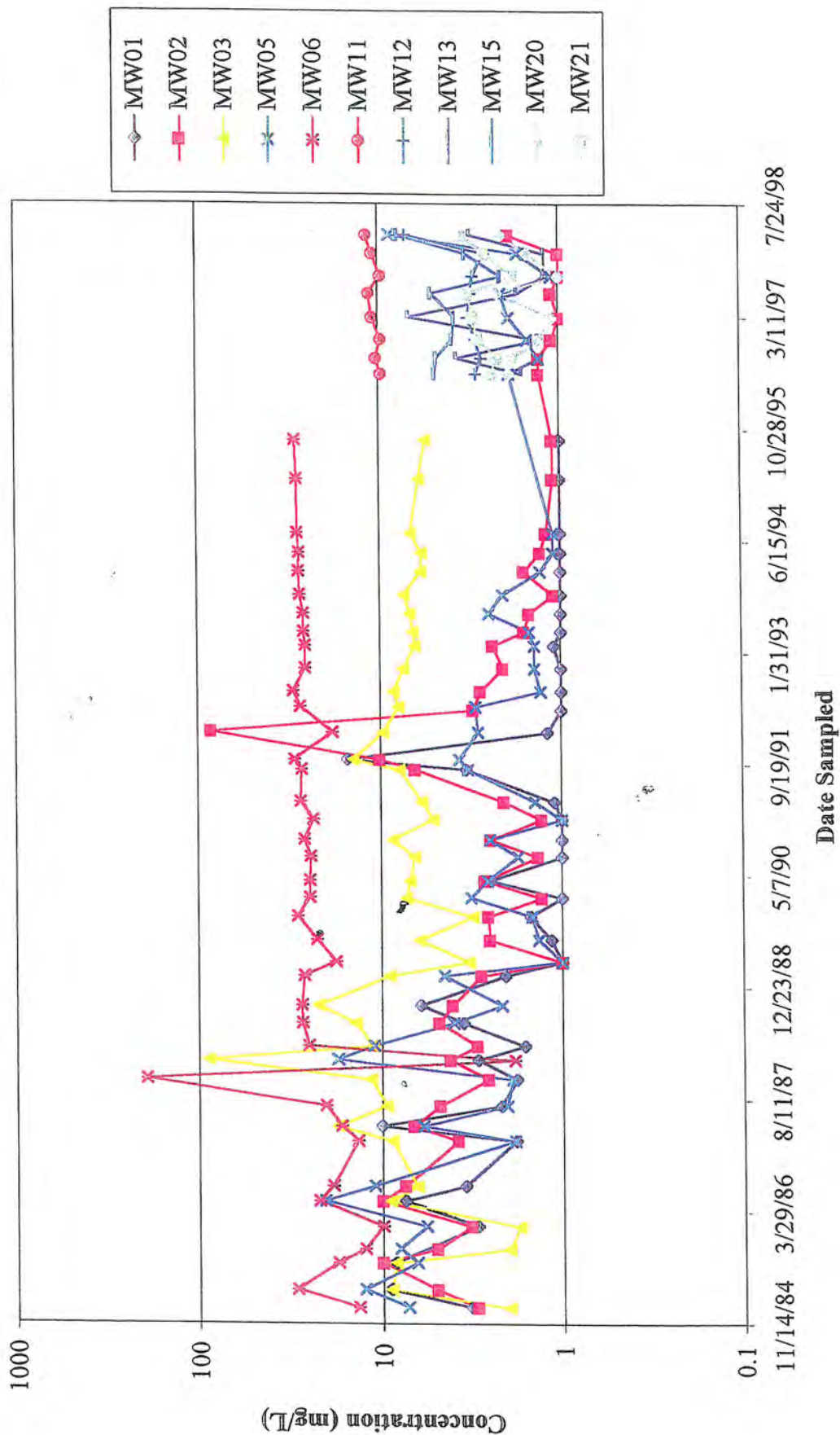
PAGE: 170

ACTIVE RECORD DETAIL REPORT
TEXAS NATURAL RESOURCE CONSERVATION COMM

DATE: 04/24/98
TIME: 08:56:11

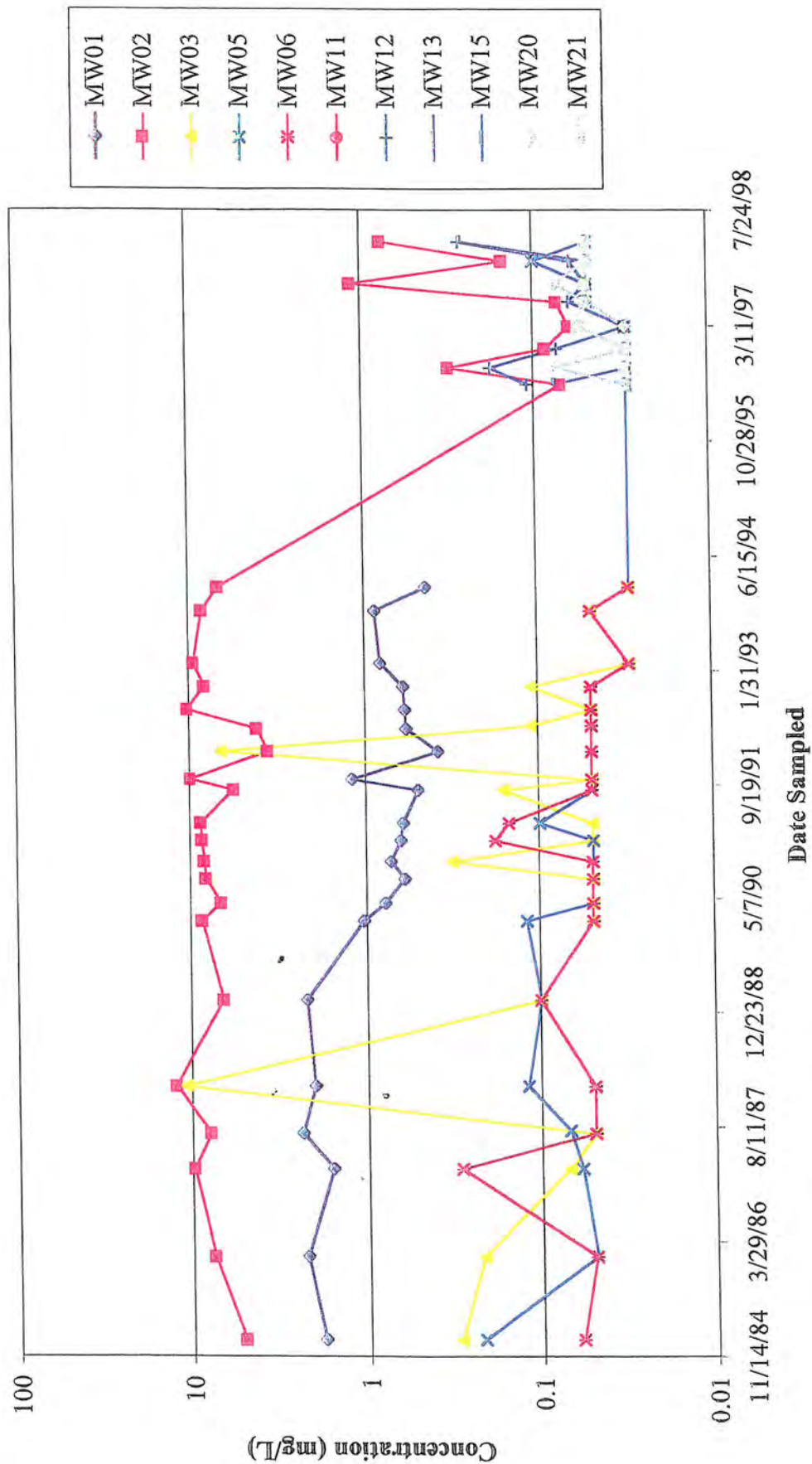
DEPT. CODE	RECORD IDENTIFICATION	REF. ID	CREATION DATE	EVENT DATE	SUBMIT DATE	VITAL REC.	RETENTION PERIOD	MEDIA CODE
MSW	MSW -000002123-RP VOL: 018	00233374	09/06/96		09/06/96	NO		P
	REPORT 1995 SOIL LINER EVALUATION REPORT SUBMITTAL SLER #95-05							
MSW	MSW -000002123-RP VOL: 019	00233375	09/06/96		09/06/96	NO		P
	REPORT 1996 CERTIFICATION OF COMPLIANCE WITH GROUND-WATER MONITORING REQUIREMENTS OCTOBER 9 1995 REVISED							
MSW	MSW -000002123-RP VOL: 020	00233377	09/06/96		09/06/96	NO		P
	REPORT 1996 GROUND-WATER SAMPLING AND ANALYSIS PLAN OCTOBER 9 1995 REVISED							
MSW	MSW -000002123-RP VOL: 021	00233379	06/12/97		06/12/97	NO		P
	REPORT 1996 SOIL LINER EVALUATION REPORT #96-02							
TH	MSW -000002123-RP VOL: 022	00248024	06/12/97		06/12/97	NO		P
	REPORT 1997 SOIL LINER EVALUATION REPORT #96-04							
MSW	MSW -000002123-RP VOL: 023	00254966	06/11/97		06/11/97	NO		P
	REPORT 1997 CLASS I PERMIT MODIFICATION							
MSW	MSW -000002123-RP VOL: 024	00254890	06/11/97		06/11/97	NO		P
	REPORT 1997 GROUND WATER SAMPLING RESULTS FIRST SUBTITLE D DETECTION MONITORING EVENT:BACKGROUND							
MSW	MSW -000002123-RP VOL: 025	00260163	08/27/97		08/27/97	NO		P
	REPORT 1997 SOIL LINER EVALUATION REPORT							
MSW	MSW -000002123-RP VOL: 026	00275682	01/30/98		01/29/98	NO		
	SOIL LINER EVALUATION REPORT 12/31/97							
TH	MSW -000002123-RP VOL: 027	00280869	04/09/98		04/09/98	NO		P
	REPORT 1998 SOIL AND LINER EVALUATION REPORT							

Waste Management Total Organic Carbon in Groundwater

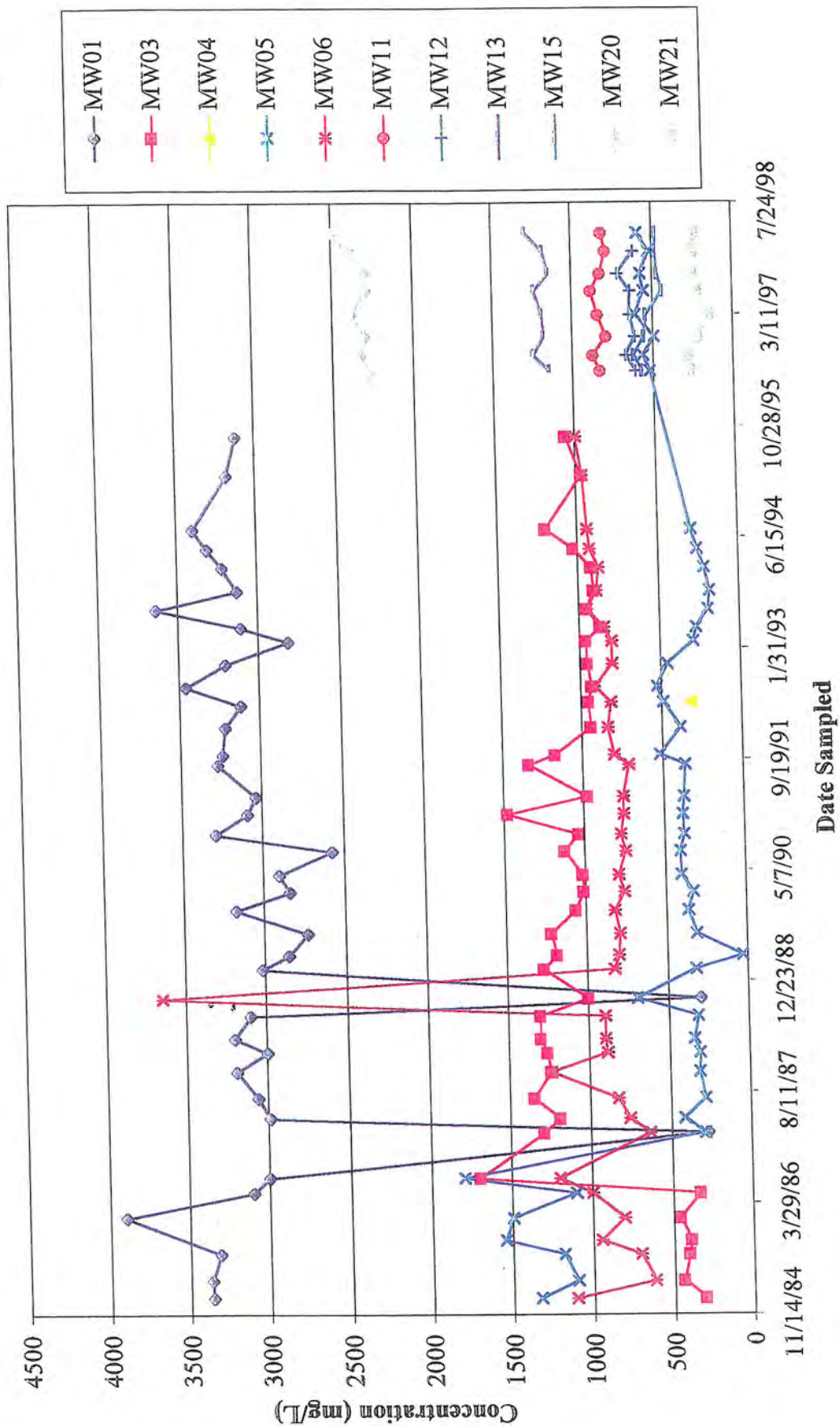


Note: All concentrations below the detection limit were plotted at 1 mg/L

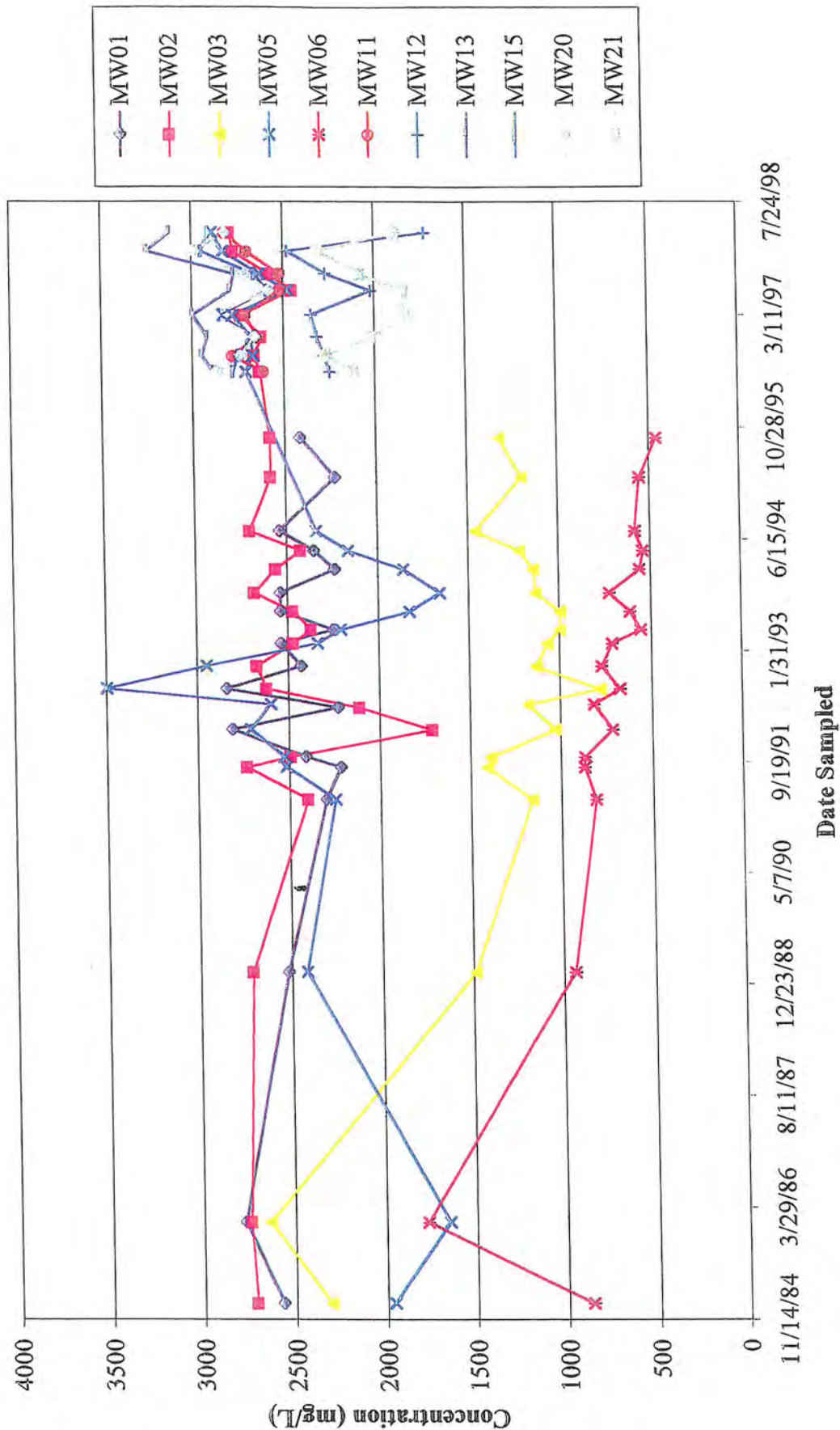
Waste Management Nitrate in Groundwater



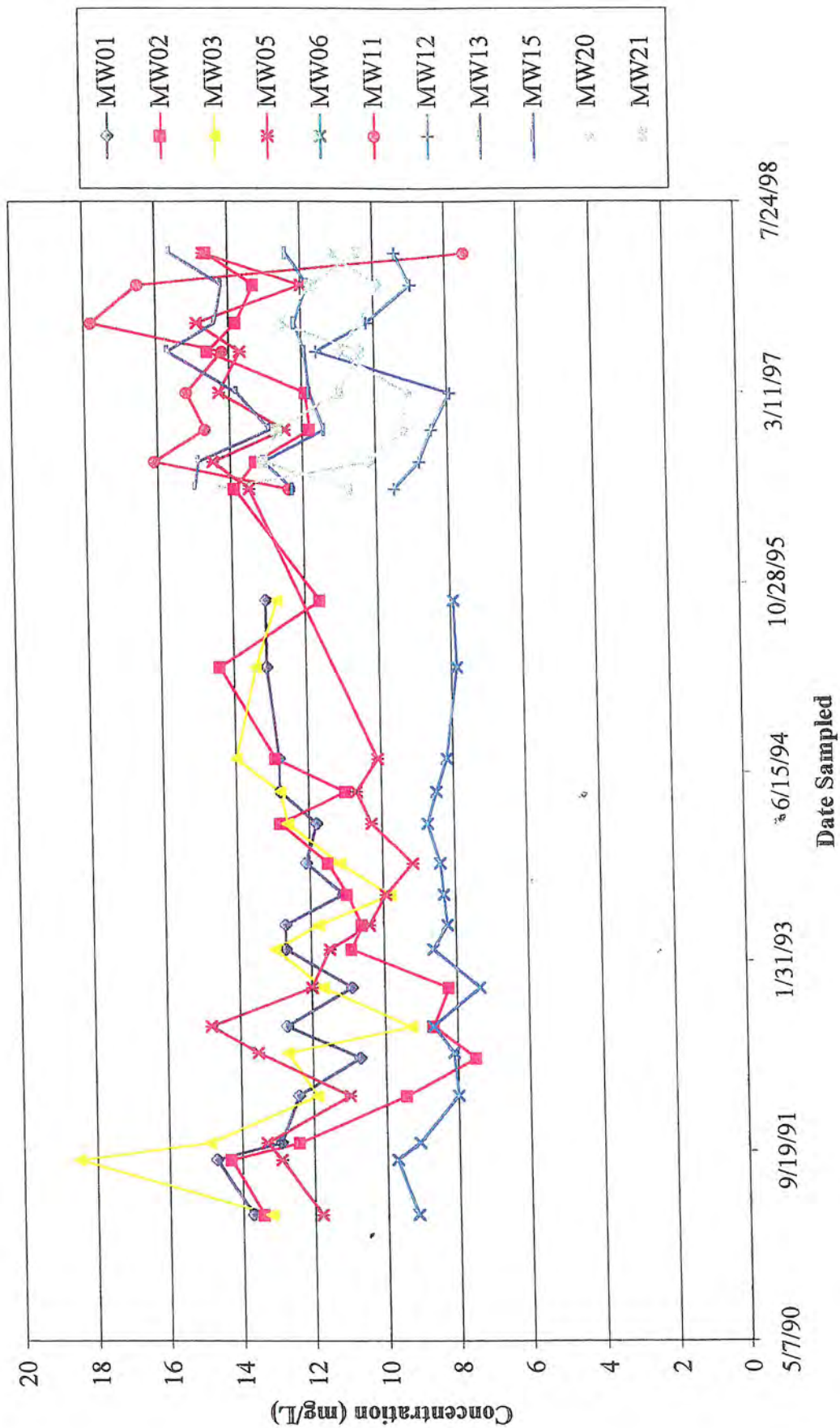
Waste Management Chloride in Groundwater



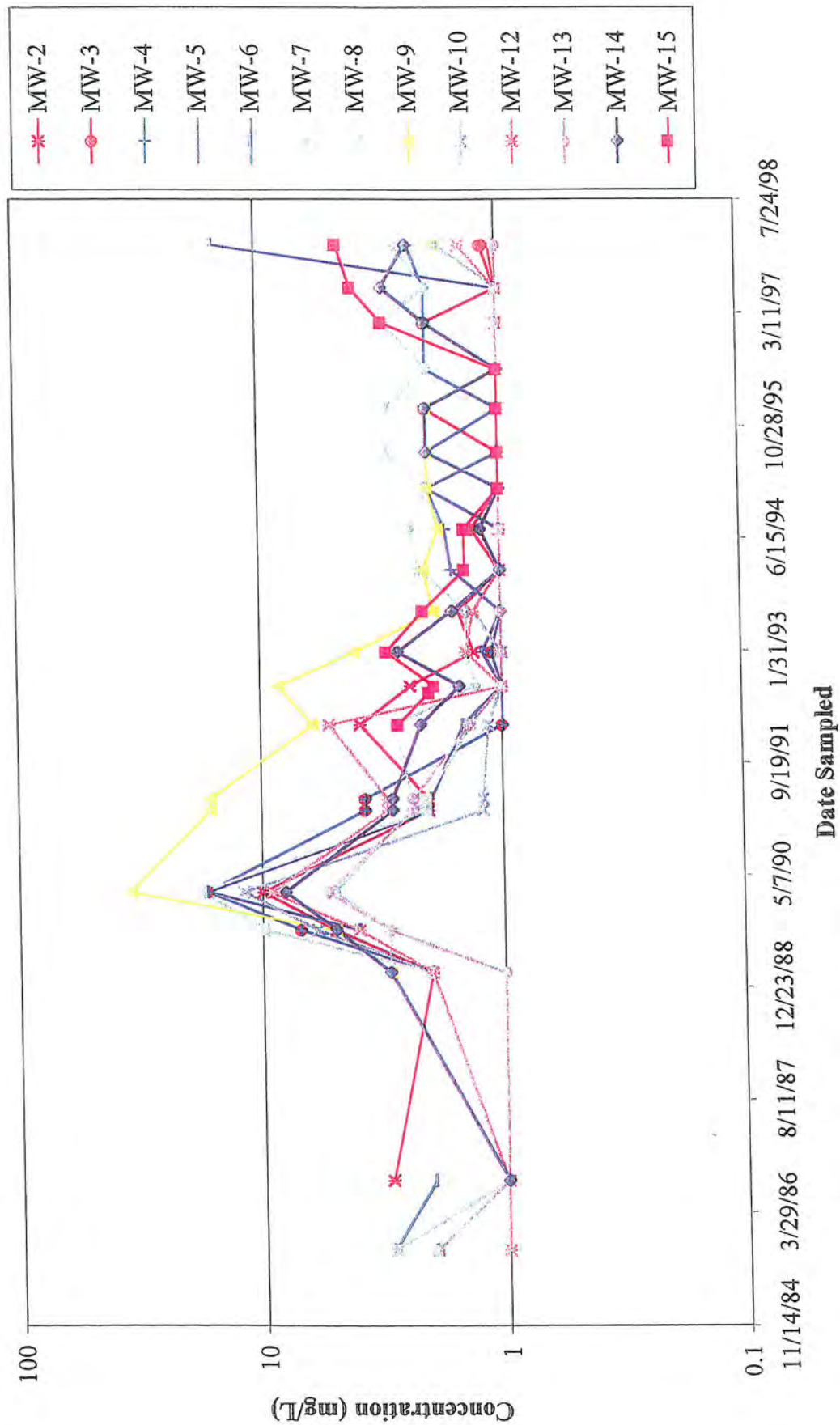
Waste Management Sulfate in Groundwater



Waste Management Potassium in Groundwater

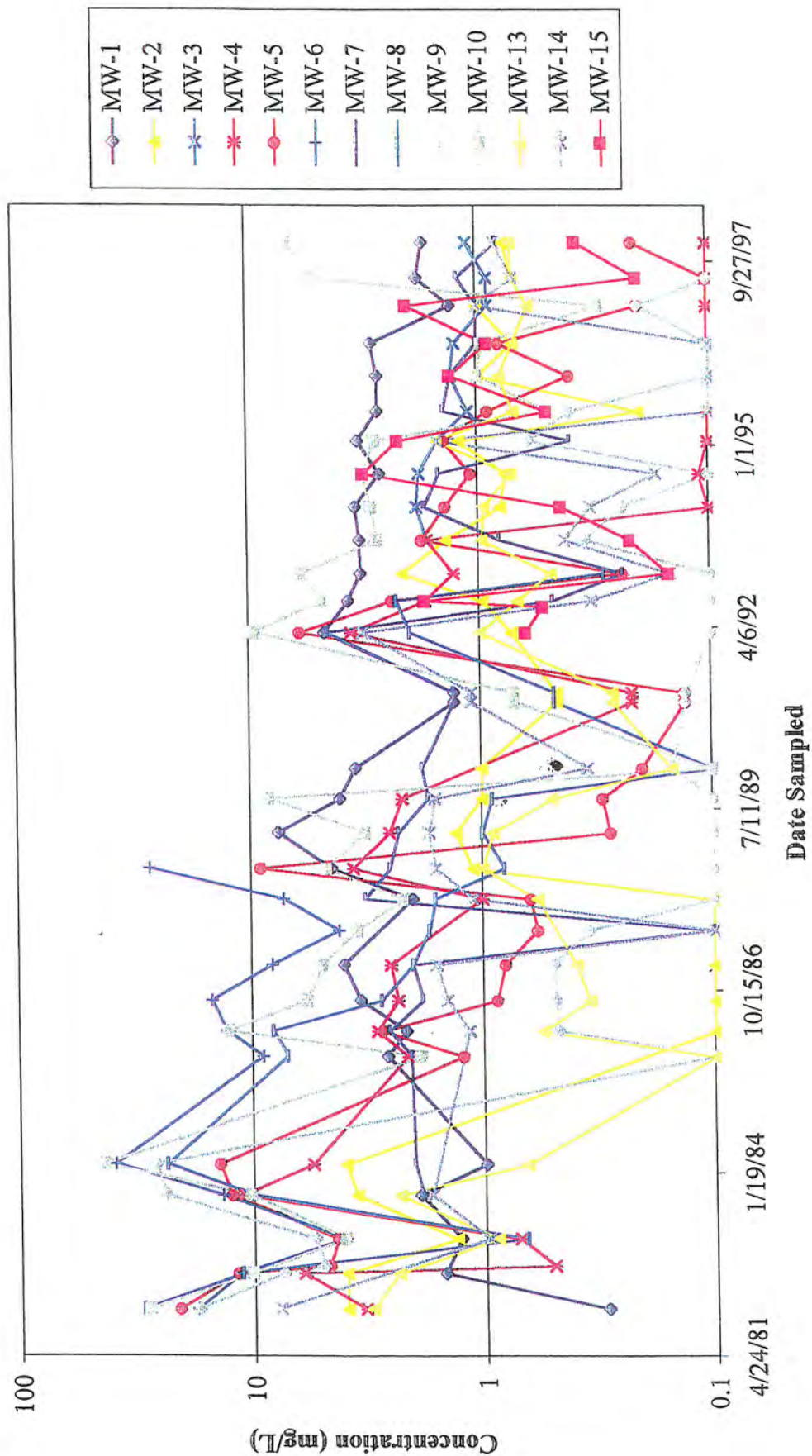


Browning-Ferris Total Organic Carbon in Groundwater

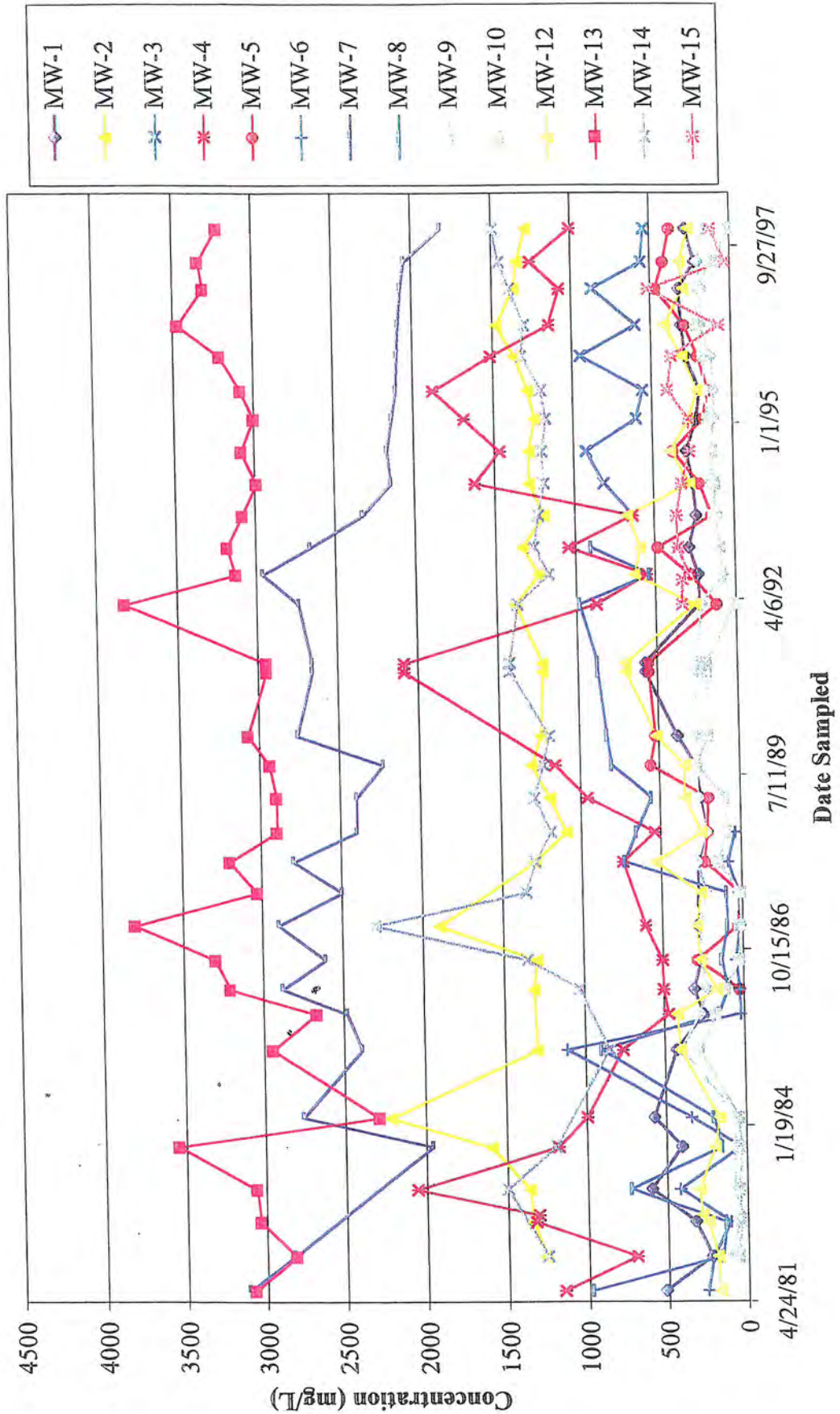


Note: All concentrations below the detection limit were plotted at 1 mg/L

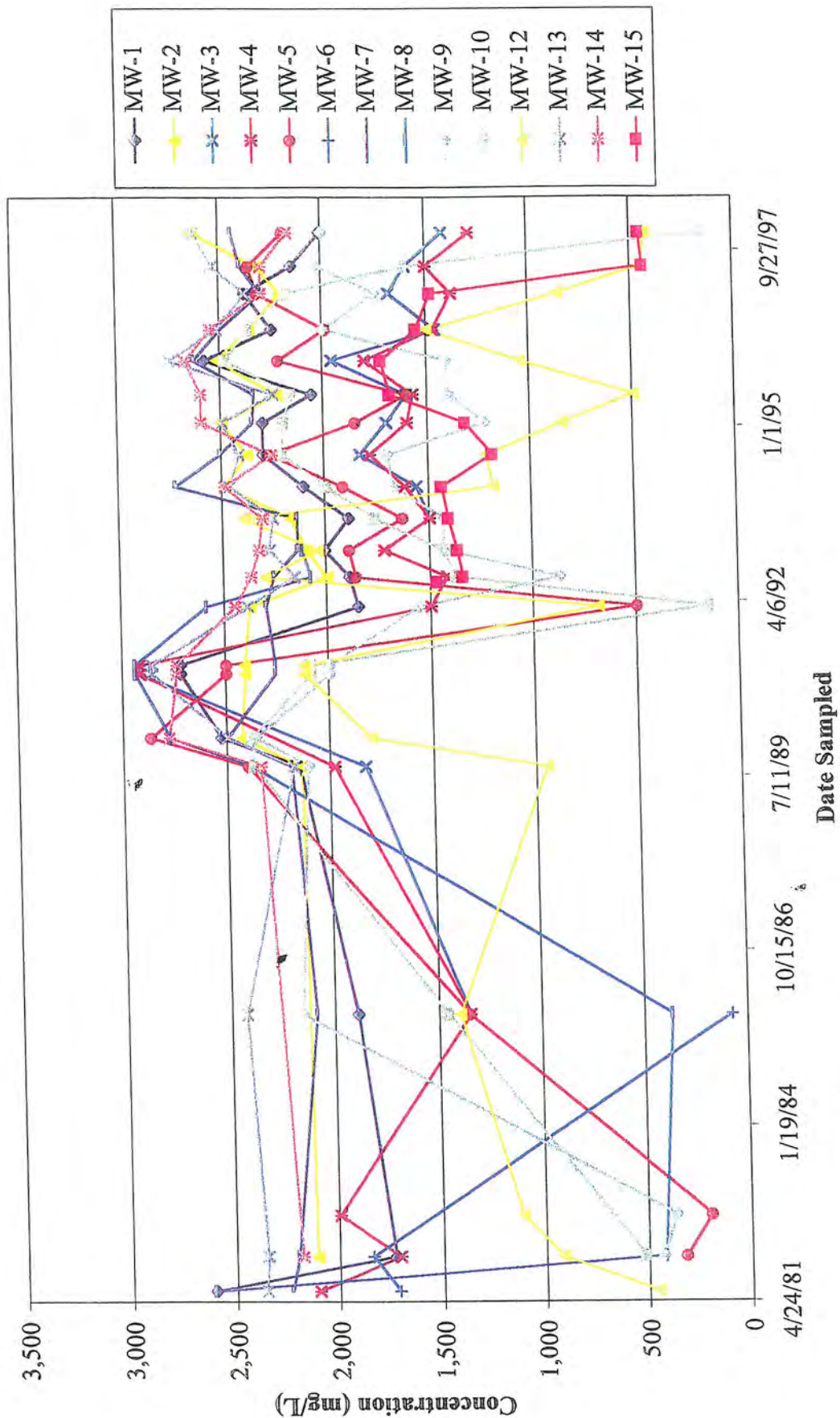
Browning-Ferri Nitrate in Groundwater



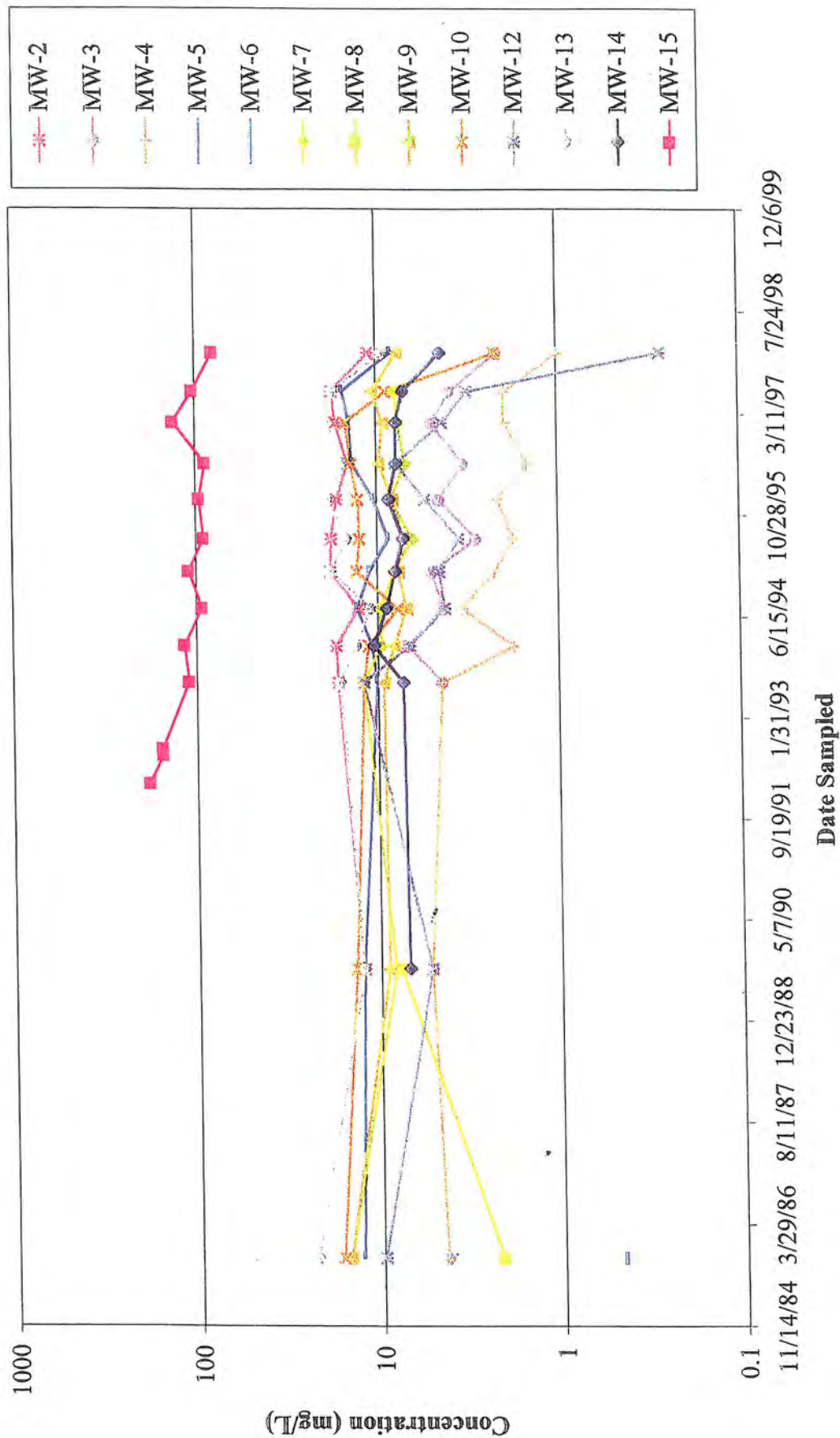
Browning-Ferris Chloride in Groundwater



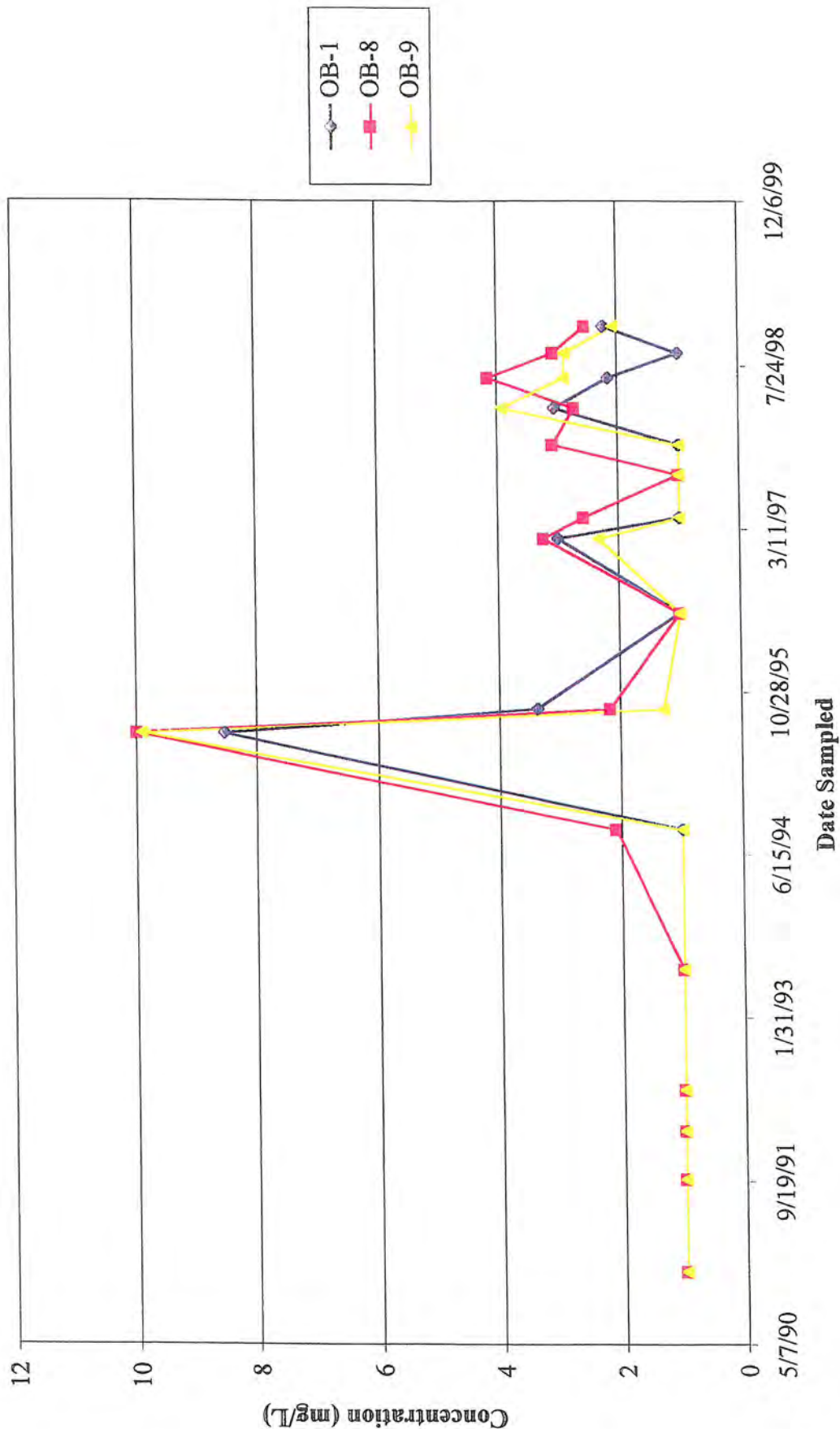
Browning-Ferris Sulfate in Groundwater



Browning-Ferris Potassium in Groundwater

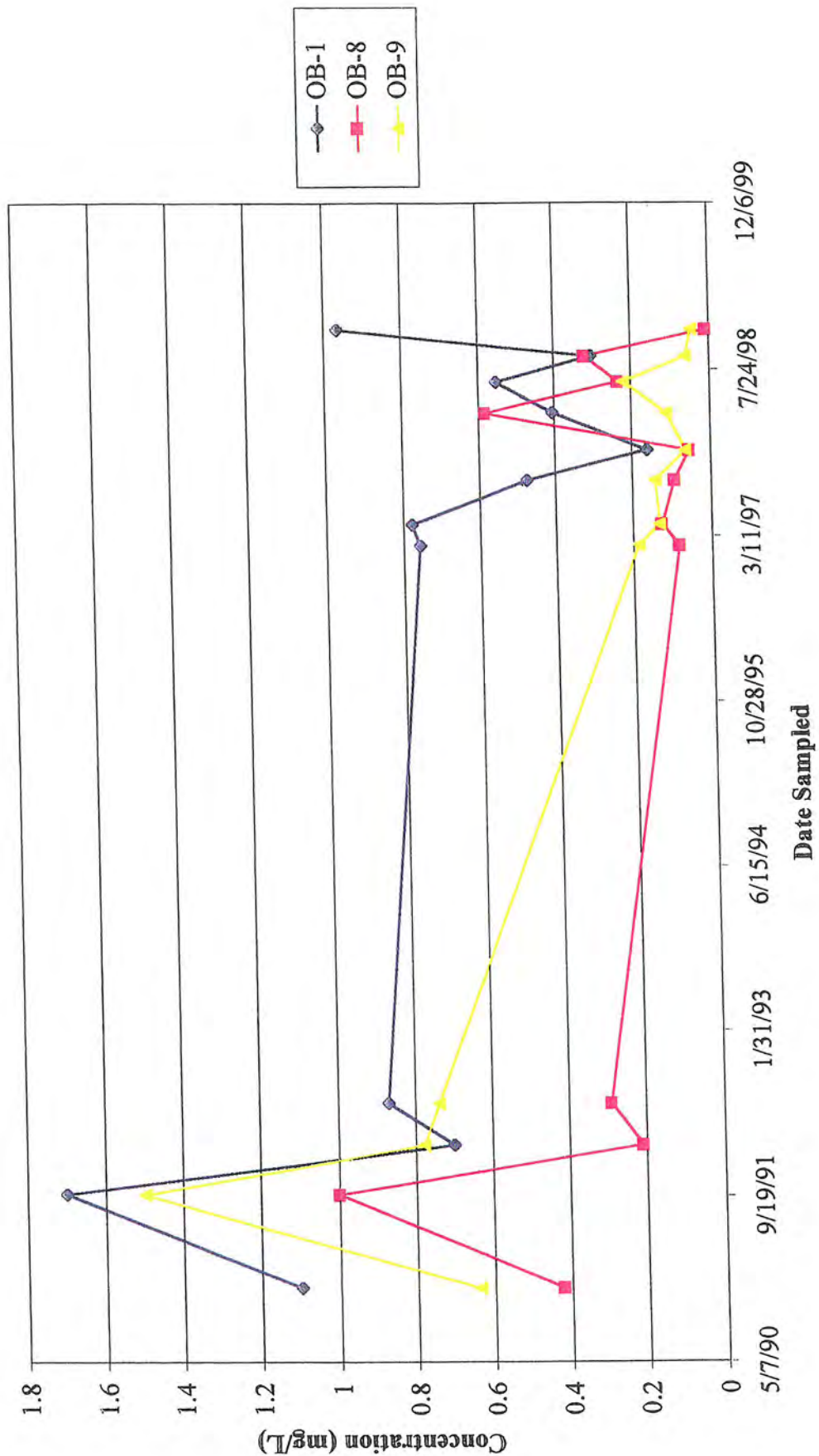


Texas Disposal Systems Total Organic Carbon in Groundwater

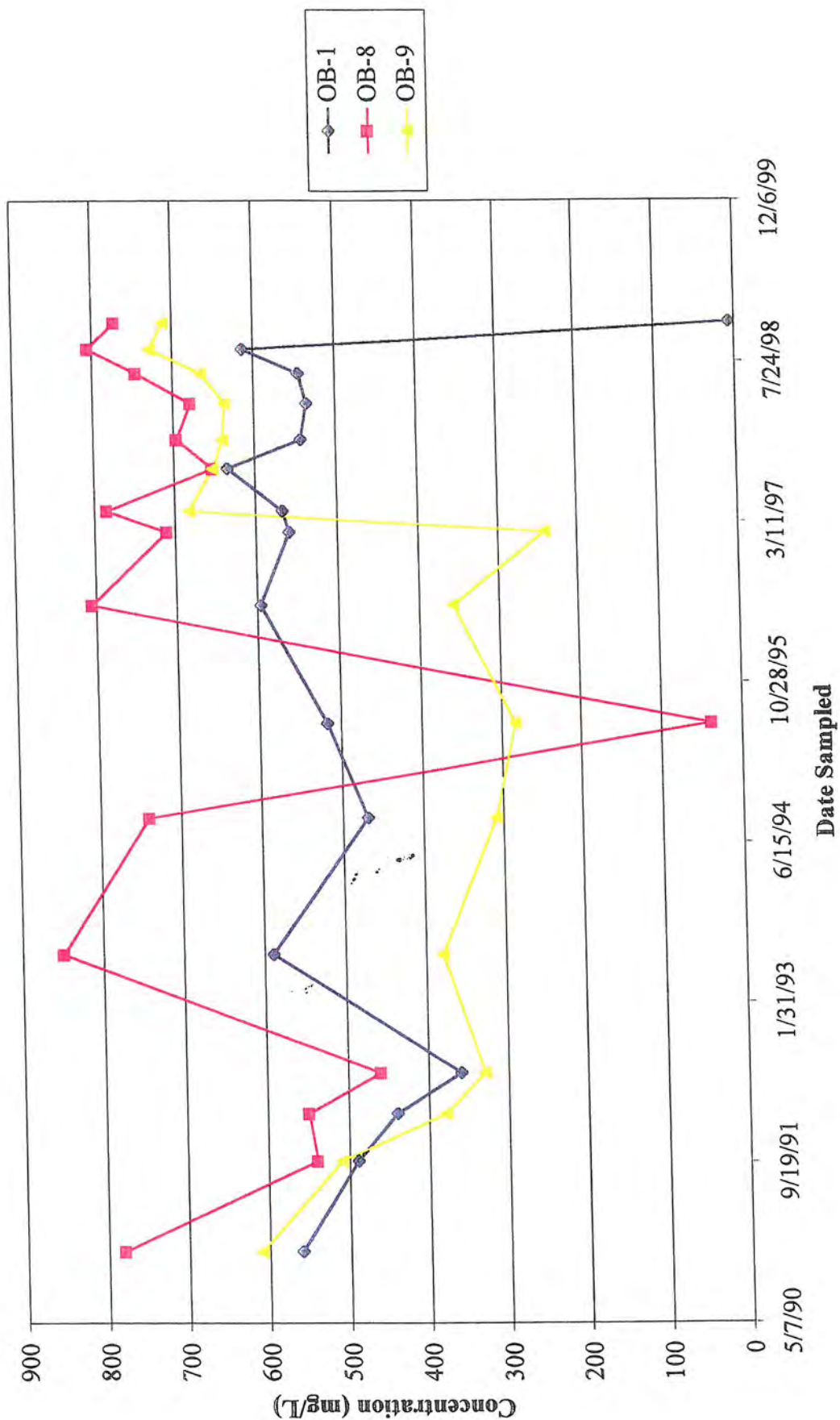


Note: All concentrations below the detection limit were plotted at 1 mg/L

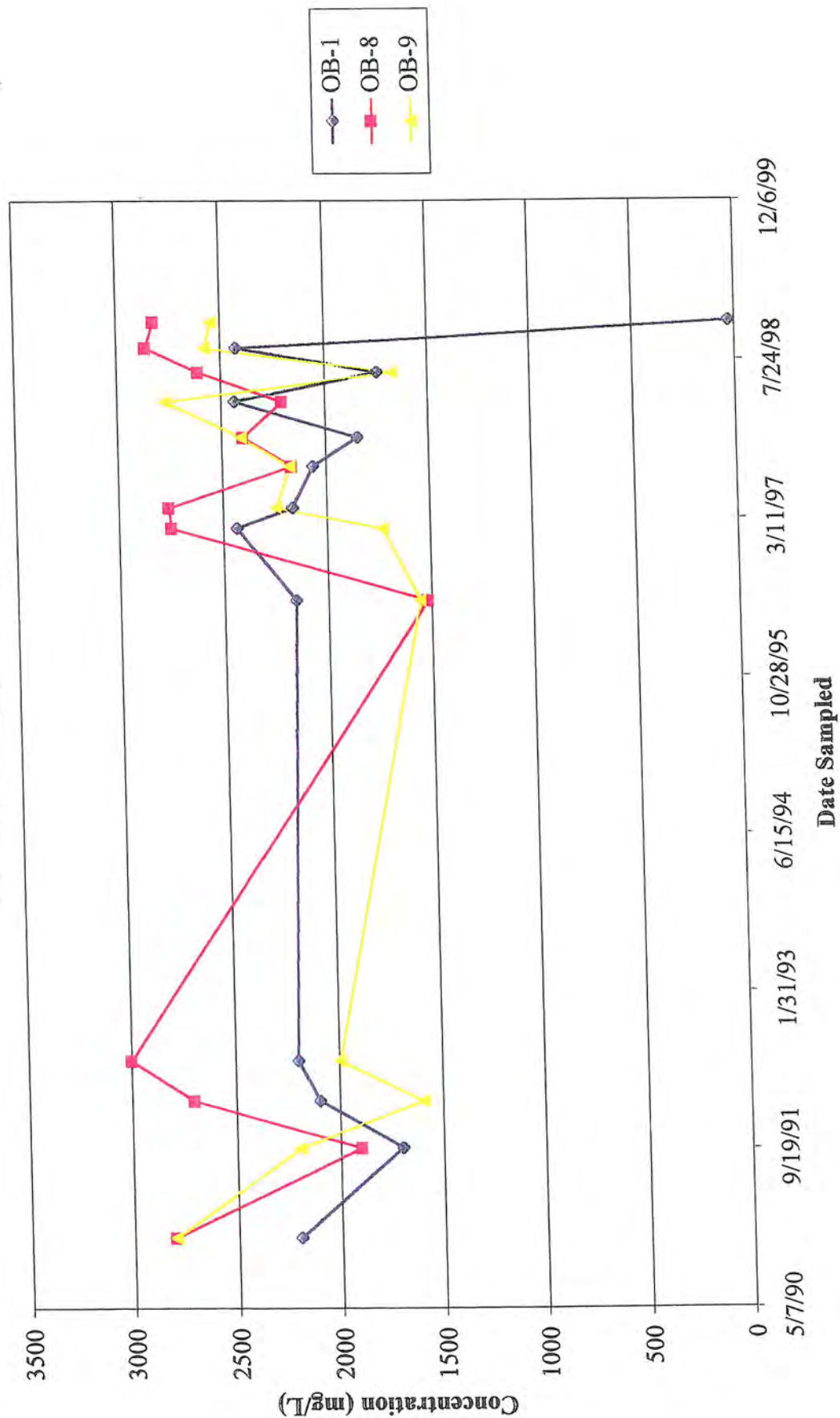
Texas Disposal Systems Nitrate in Groundwater



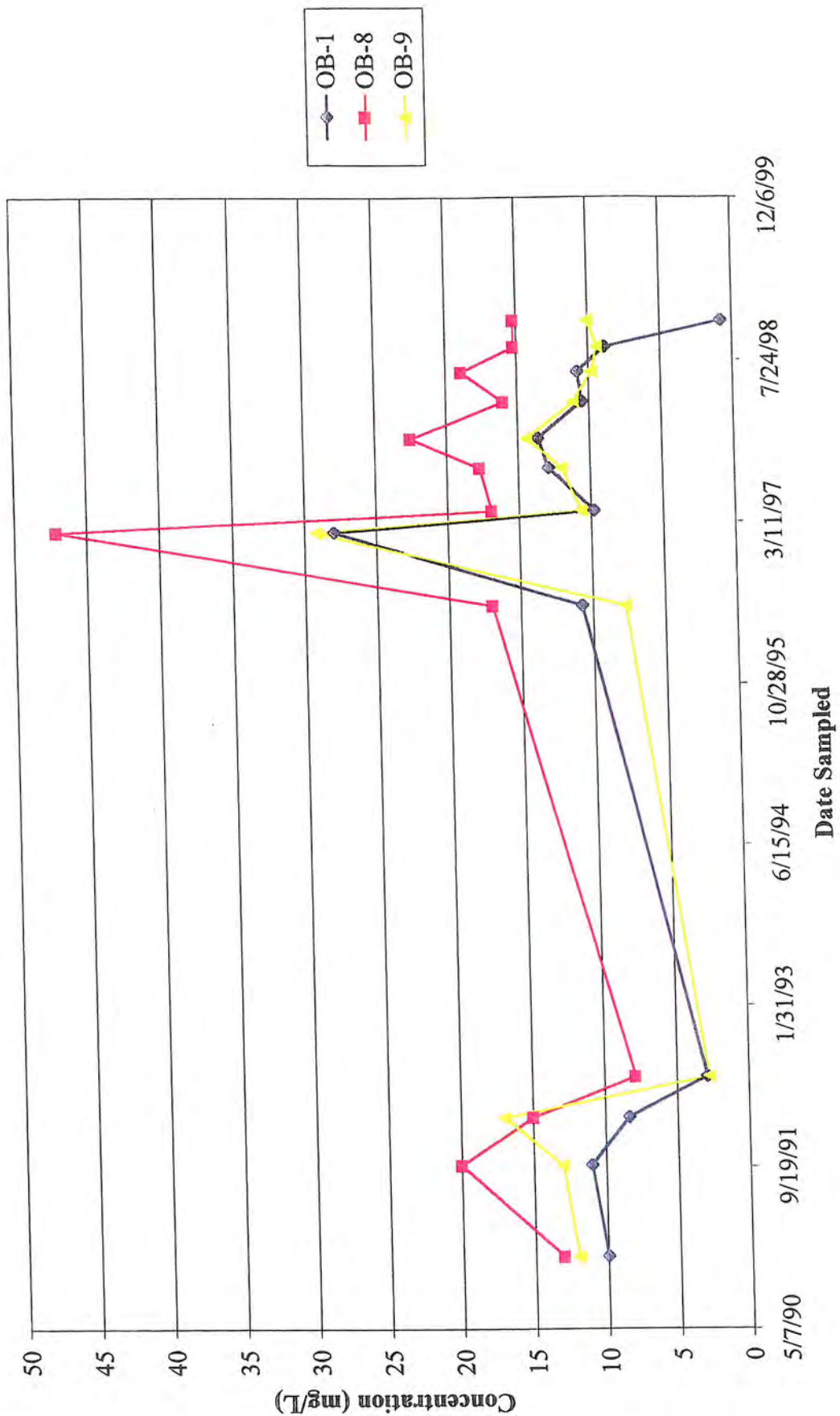
Texas Disposal Systems Chloride in Groundwater



Texas Disposal Systems Sulfate in Groundwater



Texas Disposal Systems Potassium in Groundwater



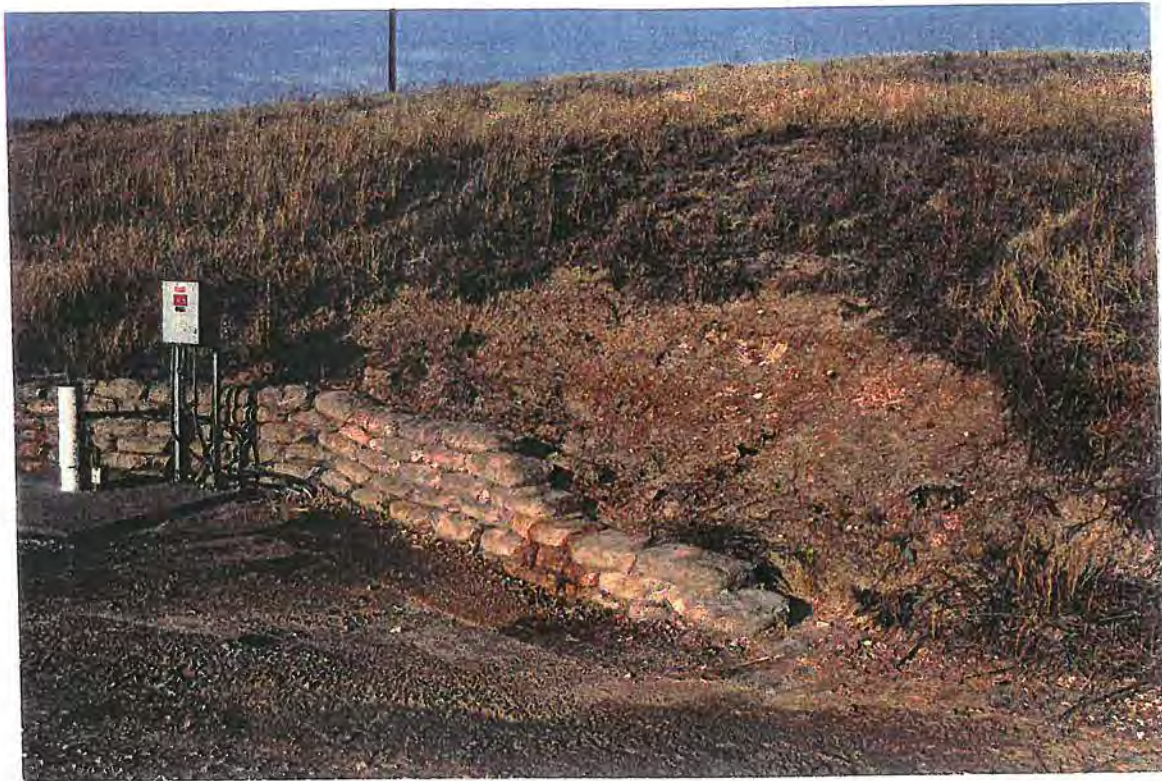


Photo No. 1: View of Travis County Landfill erosion of cover at leachate seep.



Photo No. 2: View of Travis County Landfill erosion of cover at leachate seep.



Photo No. 3: View of Travis County Landfill erosion of cover.



Photo No. 4: View of Travis County Landfill leachate seep.



Carter & Burgess

Consulting Engineers, Architects,
Construction Management and Related Services

February 16, 1999

Project No. 98-3268-010

Ms. Sherry Jones
City of Austin
Department of Public Works and Transportation
Architectural and Engineering Services
One Texas Center, 505 Barton Springs Road
Austin, Texas 78704

City of Austin
Private Landfill Environmental Assessment
CIP Project No. 5040-150-3210
Travis County, Texas

Dear Ms. Jones:

We have completed our assessment of the Austin Community Landfill (ACL), Texas Disposal Systems Landfill (TDS), and Browning-Ferris Industries Sunset Farms Landfill (BFI) sites located in Travis County being considered by the City of Austin for disposal of Municipal Solid Waste (MSW) collected by its residential and commercial solid waste collection programs, as well as MSW generated by other City departments. The scope of work, findings, and conclusions of our assessment are described in the attached report.

This work was authorized by the Professional Services Agreement entered into between the City of Austin and Carter & Burgess dated January 11, 1999. Subconsultants utilized by Carter & Burgess in the performance of this assessment include Baer Engineering and Environmental Consulting, Inc., ECO Southwest Environmental Corporation, and Pardue & Associates, Attorneys at Law.

Please note that six copies of the report contain a second binder which is an expanded Appendix B containing tables of the groundwater analytical data for the three landfills.

Carter & Burgess appreciates this opportunity to be of service to the City of Austin. Should you have any questions or comments regarding this report, please do not hesitate to call me (512-314-3165) or Clyde Bays (713-803-2149).

Sincerely,

CARTER & BURGESS, INC.

Craig M. Carter, P.G.
Project Manager

Clyde V. Bays, Ph.D., P.E.
Manager of Environmental Services
and Associate

Attachments: City of Austin Private Landfill
Assessment Report (35 Copies)

**CITY OF AUSTIN
PRIVATE LANDFILL ENVIRONMENTAL ASSESSMENT
CIP PROJECT NO. 5040-150-3210
TRAVIS COUNTY, TEXAS**

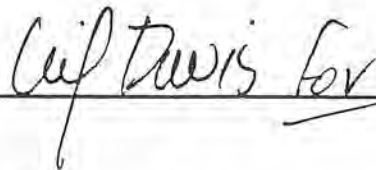
Prepared by:

**CARTER & BURGESS, INC.
ENVIRONMENTAL SERVICES DIVISION
Barton Oaks Plaza V, Suite 200
901 South MoPac Expressway
Austin, Texas**

Prepared for:

**The City of Austin
Department of Public Works and Transportation
Architectural and Engineering Services
One Texas Center
505 Barton Springs Road
Austin, Texas 78704**

**CLYDE V. BAYS, Ph.D., P.E.
MANAGER OF ENVIRONMENTAL SERVICES
AND ASSOCIATE**



**CRAIG M. CARTER, P.G.
PROJECT MANAGER**


_____ 2/16/99

C&B PROJECT NO. 98-3268-010

February, 1999

EXECUTIVE SUMMARY

The City of Austin, Architectural and Engineering Services Division, Department of Public Works and Transportation, contracted with Carter & Burgess to perform an assessment of the environmental safety of the Austin Community Landfill (ACL), Texas Disposal Systems Landfill (TDS), and Browning-Ferris Industries Sunset Farms Landfill (BFI) sites located in Travis County. Carter & Burgess' team, which includes ECO-Southwest Environmental Corporation, Baer Engineering and Environmental Consulting, Inc., and Pardue & Associates, Attorneys at Law collected and performed technical review of all data available from TNRCC files, landfill records, and third party sources for these sites. Visual inspections of the landfill sites were also performed.

For this assessment, Carter & Burgess' team reviewed available information pertaining to permitting and siting of the various landfills, landfill design and construction, operating and regulatory compliance history, and the results of groundwater and methane gas monitoring programs. Meetings were also held with current and former landfill personnel, TNRCC representatives, and neighborhood associations in order to gather information needed to evaluate the environmental safety of the various sites. The Environmental Protection Agency (EPA) Region VI Office in Dallas was contacted concerning the status of the Petition for NPL Listing filed by concerned citizens for the ACL. Present environmental impacts, possible future impacts, potential migration pathways, overall environmental risks to groundwater and surface water, and other potential liabilities were evaluated for each landfill based on the information collected during our assessment. This information as well as the findings, conclusions, and recommendations arising from our assessment are discussed in various sections of the attached report.

As part of this assessment, we also reviewed changes in federal and state regulations in effect at different intervals throughout the past 35 years pertaining to Municipal Solid Waste (MSW) disposal facilities. A number of significant regulatory changes have occurred in the area of solid waste management, although the basic concepts as to proper siting, design and construction, and operation of landfills has remained essentially the same over the years.

A summary of the significant findings and observations made for each landfill is presented below.

Austin Community Landfill

Early in the life of the ACL site, the regulatory requirements for landfilling of MSW were in their early stages. Permission was requested and granted by the Texas Department of Health (TDH) to dispose of industrial waste at the Industrial Waste Materials Management (IWMM) site located within the boundaries of the landfill with few requirements stipulated except for cover thickness and clay keyways to control lateral seepage. After the IWMM site was closed and the ACL site continued to operate as a MSW landfill, formal regulations were written to manage the disposal of MSW.

The former IWMM site was operated during times when there were minimal technical requirements for liners and no prohibitions on landfilling drummed industrial or bulk industrial liquids. The portion of the site where these activities took place was not adequately protective of the environment and as a result there is a high probability that some environmental impacts may have resulted from the operations. Since the promulgation of the earliest landfill regulations and requirements, the MSW portion of the ACL site has been operated in general compliance with the regulations in existence at the time. Even when operated during times when there were no liner requirements, the MSW landfilling operations at the ACL site likely had minimal impact on the environment because of the low permeability typically associated with the Taylor Formation

Clays.

Potential groundwater impacts were historically reported in two monitoring wells located adjacent to the former IWMM site. These monitoring wells have not been sampled in recent times. There was no quantitative groundwater discovered in our assessment data that indicates the former IWMM site is currently causing environmental impacts. Groundwater on the MSW portion of the ACL site has been impacted by organic compounds. However, the recently detected organic compounds appear restricted to the western portion of the property at low concentrations and are likely associated with landfill gas as is typical of MSW landfills.

Data reviewed as part of this assessment showed no indication of impacts to surface water. However, based on the apparent leachate seeps observed adjacent to the unnamed tributary to Walnut Creek in the Phase 1 MSW area, surface water could potentially be impacted. Leachate management to reduce the hydraulic head in the adjacent closed Travis County Landfill and Phase 1 area should be performed before plans for additional cover are implemented.

Possible future impacts to the ACL site include lateral migration of leachate from the Phase 1 area into the unnamed tributary to Walnut Creek, and vertical and lateral migration of leachate from the former IWMM site. The existing Subtitle D monitoring program should be sufficient to detect and monitor groundwater impacts in the Weathered Taylor before they migrate offsite. However, no monitoring system has been put in place which could detect current or future vertical (downward) migration of solvents from the IWMM site. Although the possibility for vertical migration of contaminants from this site to the underlying groundwater is considered to be relatively low, the potential for impacts still exists. Given the above, the unknown contents and condition of the 21,000 buried drums at the former IWMM site presents a potential environmental risk. As long as the industrial waste remains buried at its current location it will be a source of environmental risk. Operations on the remainder of the ACL facility appear to be protective of groundwater and surface water.

Methane will continue to be generated at the ACL site and should be managed throughout the life of the landfill. The Landfill Gas Recovery System appears to be effective at controlling the gas generated by the landfilled waste at this time.

A Petition for National Priority Listing (NPL) has been filed with the EPA Region VI Office for property now owned by Waste Management of Texas but not included in the TNRCC Permit currently in effect for the ACL. This property is the approximate site of the former IWMM facility, and was excluded from the currently active MSW landfill by virtue of a permit amendment approved in 1981. A Preliminary Assessment of this site has been completed, but the results of the assessment and any subsequent actions which may be taken by the EPA or other state agencies is unknown at this time.

BFI Sunset Farms Landfill

The Sunset Farms site is currently and historically has operated in substantial accordance with applicable state and federal MSW regulations established for Type I landfills. A limited area of organic impacts to groundwater is present near the southwest corner of the site. This area of impacts appears related to the landfill activities on the adjacent ACL site. Data reviewed as part of this assessment showed no indication of impacts to surface water. The Landfill Gas Recovery System and electric generating facility which has been in operation for two years are apparently effective at controlling gas buildup within the landfill.

BFI appears to be operating the Sunset Farms Landfill in a responsible manner protective of groundwater and surface water. The potential for future impacts to groundwater or surface water at the Sunset Farms Landfill is considered to be relatively low. Although the organic impacts detected in groundwater on the southwest portion of the property appear related to the ACL site, the Sunset Farms Landfill might be considered a potential source of contamination and be required to defend itself, if groundwater on surrounding properties was found to be impacted.

TDS Landfill

The TDS Landfill has been in operation for about 8 years. The original design specified in-situ soil liners for the landfill bottom and unweathered clay sidewalls. Weathered sidewall areas were to be lined with a minimum of 3 feet of compacted clay. The original final cover design consisted of 1.5 feet of compacted clay overlain by 1 foot of topsoil. A leachate collection system was not included in the original design. In 1994, the final cover design was changed to 4 feet of topsoil over 1.5 feet of compacted clay. Leachate collection systems were also installed in the post-Subtitle D sectors of the landfill.

Based on documents reviewed during this assessment, the TDS was constructed and has been operated in accordance with applicable regulatory requirements. No present groundwater impacts were observed or indicated by this assessment. Further, no evidence of surface water impacts was found. In addition, there is no evidence of landfill gas reaching the property boundary. TDS appears to be a very responsible operator and has implemented measures which appear to be protective of groundwater and surface water at the site.

Recommendations

It is the Carter & Burgess team's opinion that the former IWMM site at the ACL poses a substantial environmental risk and potential future liability to the owners and users of the site. Specific recommendations are made in **Section 8** of our report concerning further monitoring and investigations needed at the site in order to detect potential past and future releases to the environment.

Recommendations are also made to sample leachate seeps at the Phase 1 site on the ACL property as well as seeps on the Travis County Landfill to determine potential impacts to surface water in the tributary to Walnut Creek.

Carter & Burgess' team recommends removal and proper disposal of the waste at the former IWMM site in order to eliminate or substantially reduce the environmental risk associated with the site.

A recommendation is also made that the ACL work with Travis County to reduce leachate buildup in the Phase 1 area by operating the leachate recovery system in the Travis County Landfill in order to lower leachate levels in both areas.

From: Ryan Hobbs <rhobbs@texasdisposal.com>
Sent: Friday, January 19, 2018 4:27 PM
To: Raine, Woody
Cc: Adam Gregory
Subject: Texas Disposal Systems, Inc.'s (TDS) comments regarding Draft Landfill Criteria
Attachments: Memo Regarding TDS GHG Emissions - 06-09-17.pdf; Council Resolutions 981105-52 & 99107-35.pdf; 11-8-17 ZWAC Memo-GN FINAL.PDF; Council Resolution 20100408-033.pdf; 4-14-2010 SWAC Resolution.pdf; Council Resolution 010524-70.pdf

These brief comments have been prepared by TDS and pertain to the Draft Landfill Criteria published by Austin Resource Recovery on January 10, 2018. TDS understands that City staff intends to present a consolidation of all stakeholder comments at the February meeting of the Zero Waste Advisory Commission (ZWAC).

TDS representatives were actively engaged in the proceedings of the City Council's Waste Management Policy Working during the spring and summer of 2017. It is also important to note TDS' 40-year history in the Austin marketplace and its broad knowledge and understanding of the active, closed and proposed landfill facilities within the region. Moreover, TDS owns and operates one of the largest solid waste landfills serving the City of Austin and surrounding counties. Significant volumes of City-managed solid waste generated under numerous multi-year contracts and 100% of the City's residential solid waste is disposed of at the TDS Landfill under a 30-year contract resulting from a competitive solicitation process.

Given TDS' full understanding of the pending policy issues regarding City use of private landfill facilities, TDS overall view is that the Draft Landfill Criteria plainly "misses the mark" and will be met with strong opposition from a broad range of stakeholders unless considerable revisions are made. TDS' preliminary observations regarding the Draft Landfill Criteria include but are not limited to the following:

- ARR's Draft Landfill Criteria fails to accurately represent the specific scoring categories described in the 7/21/17 recommendation of the Council's Working Group. Specifically, staff's draft scoring categories include only two of the Working Group's recommended scoring categories ("Carbon Footprint" and "Community Impact & Social Equity"), but also introduce two new scoring categories ("Operational Considerations" and "Environmental, Zero Waste, and Sustainability").
- ARR's Draft Landfill Criteria would utilize a specific model to quantify landfill gas emissions which has been shown to produce results that are clearly inconsistent with local reality. Due to the model's failure to consider numerous facility specific conditions and waste stream variations, it effectively penalizes facilities that have been successful in minimizing the generation of landfill gas. Please see attached memo regarding Greenhouse Gas Emission Estimates at the Texas Disposal Systems Landfill.
- ARR's Draft Landfill Criteria fails to appropriately recognize and give proper consideration to the \$100,000 City Council-commissioned study (Carter & Burgess Private Landfill Environmental Assessment) which led the Council to decline approval of a staff-proposed long-term landfill disposal services contract to use the Waste Management Austin Community Landfill (ACL), due to the Carter & Burgess' finding that the ACL poses a substantial environmental risk and potential future liability to the owners and users of the site. For reference, please see the attached City Council resolutions authorizing the Carter & Burgess Private Landfill Assessment.
- ARR's Draft Landfill Criteria fails to appropriately recognize and give proper consideration to previous testimony from City of Austin experts and attorneys about the Waste Management Austin Community Landfill during the contested case hearing regarding the landfill's previous permit expansion application. Please see the attached

memorandum prepared by Gary Newton, which was previously submitted to ZWAC at the November 2017 meeting and to City staff on December 12, 2017.

- ARR's Draft Landfill Criteria fails to appropriately recognize and give proper consideration to several previous resolutions reflecting ongoing City Council and Zero Waste Advisory Commission opposition to ACL. For reference, please see the attached Resolutions.
- ARR's Draft Landfill Criteria seemingly attempts to unnecessarily complicate the policy issue and greatly expand staff's desired oversight of private landfill facilities already under contract, and of private haulers. Staff is now asserting that these criteria will affect EXISTING landfill contracts as well as collection and hauling contracts. Retroactive application of any landfill criteria to previously executed contracts for landfill disposal and hauling services would unquestionably be met with a legal challenge by parties to those contracts.

TDS intends to continue its evaluation of the Draft Landfill Criteria and to actively participate in the forthcoming discussions regarding this important policy matter.

Thanks,
Ryan Hobbs

RESOLUTION

NO. 981105-52

BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF AUSTIN:

The City Council approves negotiation of a professional services agreement with **CARTER-BURGESS, INC.**, 901 South MoPac Expressway, Suite 200, Austin, TX 78746 for professional engineering services for the Private Landfill Environmental Assessment Project in an amount not to exceed \$50,000; and authorizes the City Manager or his designee to enter into the agreement on such terms and conditions as may be reasonable, necessary, or required. Public Works & Transportation for Solid Waste Services Department.

ADOPTED: November 5, 1998 **ATTEST:** *Betty G. Brown*
Betty G. Brown
Deputy City Clerk

MRS/tba
j:\rcal\sw\1105cart.res

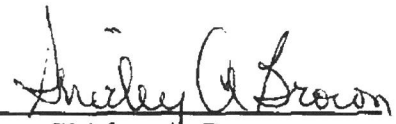
RESOLUTION

NO. 990107-35

BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF AUSTIN:

The City Council approves execution of an amendment to the professional services agreement with **CARTER-BURGESS, INC.**, 901 South MoPac Expressway, Suite 200, Austin, TX 78746 for additional funding for the private Landfill Environmental Assessment Project in an amount not to exceed \$45,078.48 for a total contract amount not to exceed \$95,078.48; and authorizes the City Manager or his designee to enter into the agreement on such terms and conditions as may be reasonable, necessary, or required. Public Works for Solid Waste Services Department.

ADOPTED: January 7, 1999 ATTEST:


Shirley A. Brown
City Clerk

SH/tba
jvrcalsw\0107cart.res

CITY OF AUSTIN

SOLID WASTE ADVISORY COMMISSION

Waste Management, Inc. Landfill Expansion Appeal Process Resolution

April 14, 2010

Whereas, the recent approval by the TCEQ of Waste Management, Inc.'s request for expansion of their landfill in northeast Austin will materially impact solid waste management and land use compatibility in Austin for the foreseeable future, and

Whereas, the City has a responsibility to participate in discussions, decisions, and actions that affect its citizens and neighbors,

Be it hereby resolved, that;

SWAC requests Council to be a party in any appeal process that may be ongoing or upcoming regarding this expansion approval.

To: Zero Waste Advisory Commission (ZWAC)

From: Gary Newton

Date: November 8, 2017

One of the recommendations of the Waste Management Policy Working Group issued on July 21, 2017 was item number 2. This recommendation says to direct materials away from certain landfills based on some criteria to be developed. Perhaps the Waste Management Policy Working Group was unaware the City of Austin had commissioned an expert to conduct an environmental study of Austin area landfills in 1999. After the study was released the City Council declined to approve a contract with the Waste Management Austin Community Landfill (ACL) due to the expert's statement "the ACL poses a substantial environmental risk and potential future liability to the owners and users of the site." This position was based on environmental conditions that existed prior to 1999 and still exist today.

The Draft Landfill Criteria attached as back-up material to Agenda item 3.C. does not include a review of the environmental issues of concern to the City's independent expert had then and that are still present today. Some of these environmental concerns include:

- A pre-RCRA industrial/hazardous waste unit with about 21,000 drums or approximately 80,000 tons of waste disposed in unlined pits and trenches.
- The boundaries of this industrial/hazardous waste unit are not accurately known.
- The groundwater monitoring plan for this industrial/hazardous waste unit is not sufficient to ensure detection of migration of contaminants.
- There is a lack of groundwater and landfill gas monitoring wells in a large area between the industrial/hazardous waste unit and the closed Travis County landfill where off-site migration of contaminants could occur without detection.

ZWAC also may be interested in what City of Austin experts and attorneys had to say about the ACL because they expressed a very definitive position against the ACL over many years. The comments below are excerpts from the 1999 Carter & Burgess Report and from filings made by the City of Austin as a protestant in the contested case seeking denial of an ACL expansion. The passage of time may have dimmed memories of these statements and people handling the matter on behalf of the City of Austin may have moved on to other endeavors. Despite the passage of time, the City of Austin statements remain valid today because nothing has changed with the conditions of concern existing back then at the landfill that were the basis of these criticisms.

[February 16, 1999 Carter & Burgess ACL Environmental Assessment](#)

Recommendations – It is Carter & Burgess team's opinion that the former IWMM site at the ACL poses a substantial environmental risk and potential future liability to the owners and users of the site.

[May 17, 2007 Austin City Council Resolution](#)

Austin City Council opposes the WMI ACL expansion and directs the City Manager to seek closure of the ACL by November 1, 2015.

May 8, 2009 City of Austin's Closing Arguments

P. 1 - The City of Austin is opposed to the issuance of a permit amendment to extend the size and life of the WMI landfill facility located in northeast Travis County.

P. 2 - The Applicant has failed to meet its burden to prove that its application complies with all requirements. Specifically, the Applicant has not demonstrated that the proposed permit is protective of human health, welfare and the environment; has not shown that the proposed permit is compatible with surrounding land uses; and has not shown that the proposed permit is in conformance with the Regional Solid Waste Management Plan.

P. 4 - The application does not include adequate protection of groundwater and surface water in relation to the effects of the IWU and Phase I areas. WMI did not adequately assess the boundaries of the phase one area or the IWU area. In addition, WMI failed to properly assess the site history, including leaks, or the municipal and industrial waste materials disposed in the units and the chemical fate and transport of associated contaminants.

P. 4 - Applicant did not properly assess this area and consequently critical characteristics were not taken into account in the groundwater monitoring system and point of compliance design.

P. 5 - The groundwater monitoring and point of compliance plans are insufficient to assess the effects of the IWU and Phase I on the groundwater.

P. 9 - The evidence therefore indicates that the design of WMI's proposed groundwater monitoring system all but ignores the IWU and Phase I areas.

P. 9 - There is baffling testimony on the part of ED witness Avakian that perhaps the IWU or Phase I areas do not need to be within the point of compliance because they were pre-Subtitle D areas.

P. 11 - In fact as Executive Director Expert Avakian testified, the IWU is not being monitored directly. Mr. Avakian explained that monitoring of the IWU was incidental to the monitoring program and not its objective, and he did not consider the contents of the IWU in his evaluation of the proposed groundwater monitoring system.

P. 13 - The evidence establishes that the IWU unit contains solvents, acids and saline water all of which may desiccate clays. Although WMI states that it is in light of these characteristics that they have monitoring wells around the IWU, in fact this is not the case. The groundwater monitoring plan proposed by the Applicant has only one well which will conceivably detect any of the potential contaminants in groundwater from the IWU. The plan does not have constituent testing for many of the materials in the IWU.

May 29, 2009 City of Austin's Reply to Closing Arguments

P. 1 - The Applicant postulates that if the permit application meets the regulatory requirements then it is automatically deemed to "safeguard the health, welfare, and physical property of the people and the environment." This argument however, is fatally flawed in that the entity charged with reviewing the permit application to determine if it meets the regulatory requirements, the ED, (A) does not consider at all whether or not the application will safeguard the health, welfare, and physical property of the people

and the environment when performing its review; and (B) does not make any determination with regards to key issues such as land use compatibility or conformance with the regional solid waste management plan, that are determinative as to whether or not a permit application safeguards the health, welfare, and physical property of the people and the environment.

P. 2 - The Applicant argues that its application is protective of groundwater and surface water because the IWU and the ACRD Facility are not unique. This is not true. There was no testimony or evidence indicating the presence of another facility in Texas or the U.S. with an operating MSW facility with the presence of a large industrial or hazardous waste facility located in the middle of it. The site characteristics clearly presents unique hazards and challenges that require that this be clearly addressed in the facilities permit to protect the environment and public health and safety as per the regulatory requirement to consider site history and site specific conditions in designing the monitoring system.

P. 2 & P. 3 - Much of the City's testimony regarding the IWU was focused on concerns regarding the possibility of migration and discharge of leachate from the IWU. This is directly a concern about the IWU leachate management system, and yet neither the IWU nor the Phase I areas has a liner or leachate collection system.

P. 3 - The Executive Director states that all parties agree that the property line must be monitored as the regulations require from the entirety of the facility. The exclusion of part of the facility from monitoring and point of compliance systems is not consistent with this requirement.

P. 4 - The Applicant claims that the proposed monitoring system and wells are sufficient because there are more wells than the prior system, and that the voluntary agreement with the City enhances their claim. This doesn't make sense.

P. 5 - The Executive Director implies that because WMI has provided copies of reports of contaminants detected under the voluntary agreement it has with the City to the TCEQ, that somehow this supports the monitoring system efficacy. This is illogical. The Executive Director acknowledges the report of dioxane detection and yet would not agree that this documented, site specific condition, warrants additional monitoring requirements. In fact, releases of dioxane are documented in the voluntary monitoring reports, as well as repeatedly detected from PZ-26, but were deleted from the reports provided to the TCEQ and the City.

P. 16 - The very purpose of this evidentiary contested case hearing is to determine whether or not the permit application provides sufficient information that the proposed expansion will not "cause, suffer, allow, or permit the collection, storage, transportation, processing, or disposal of municipal solid waste . . . in such a manner that causes . . . the creation or maintenance of a nuisance, or the endangerment of the human health and welfare or the environment." The Applicant cannot overcome its burden of proof by only providing self-serving conclusionary testimony.

P. 16 - In this case, the ED has gone out of its way to support the Applicant's burden of proof via it's prefiled testimony, questions during the hearing, and finally in its closing argument, and it's argument must be viewed in light of its skewed participation in favor of the Applicant.

[August 20, 2009 City of Austin's Exceptions to the Proposal for Decision](#)

P. 1 - The City of Austin disagrees with Administrative Law Judge ("ALJ") Roy Scudday's proposal for decision ("PFD"), in which he recommends that Permit No. MSW-249D be issued. The Applicant failed to demonstrate that Permit No. MSW-249D meets or exceeds all applicable statutory and regulatory requirements.

P. 2 - If ever there was a case where an MSW landfill permit amendment to extend the life of the facility should be denied, this is that case. In 2004 WMI was assessed the largest fine ever levied by the TCEQ on a MSW operator in the State of Texas. One of the many reasons this application should be denied, is that the operation of this facility has and will continue to impact the surrounding neighborhoods, as evidenced by the repeated and voluminous complaints regarding odors, traffic, litter, dust, erosion and sedimentation of streams. By virtue of its record of operation, the Applicant has failed to demonstrate that the facility will not adversely impact human health or the environment, as required by 330.61 (h).

P. 2 & P. 3 - The ALJ properly considered the evidence presented concerning the voluntary groundwater monitoring agreement between the City and WMI and the placement of the wells to monitor for potential discharges from the Industrial Waste Unit ("IWU"). Accordingly he recommends inclusion of the wells in the permit. The ALJ failed to properly consider the fact that the wells in the voluntary agreement are sampled for a specific list of constituents, which were chosen by WMI as representative of potential contaminants in the groundwater that could originate from the IWU. In light of this uncontroverted evidence, and the fact that the sampling is already being done by WMI, it is unreasonable to not include the same parameters in the permit monitoring regime.

P. 5 - Finding of Fact No. 215: "Operation of the expanded landfill as requested in the Application will not result in contamination of groundwater and surface water." These Findings are not supported by the evidence. In fact, the record demonstrates that the opposite is true.

P. 12 - The record is replete with evidence that the WMI facility is currently adversely impacting human health and the environment; and since WMI is not proposing to do anything different under its proposed permit for expansion, the facility will continue to adversely impacting human health and the environment.

August 31, 2009 City of Austin's Response to Exceptions

P. 3 - The ED argues in its exceptions that the point of compliance ("POC") should not be adjusted to include the four wells that are already in existence and being monitored pursuant to a voluntary agreement between the City and WMI. What is most troubling is the ED's rational for its exceptions to adding these four wells to the point of compliance. The ED states that the Industrial Waste Unit ("IWU") should not be monitored because there were no regulations in place back when it was accepting hazardous wastes; and therefore it does not have to be monitored for releases at all. The IWU is a part of the facility. The groundwater monitoring system proposed is a multi-unit system under §330.403(b). As such, all of the MSW management units must be a part of the groundwater monitoring system. Moreover, the TCEQ can and should require monitoring of the IWU to protect human health, welfare, and the environment.

P. 4 - Finally, the ED incorrectly claims that the TCEQ rules do not apply to the IWU because it is not a "waste management unit". Although it stopped taking materials in the 1970's the IWU is still in place and is part of the facility.

P. 5 - WMI asserts that there is no basis to tie the four voluntary wells into WMI's POC. They base this assertion on the same argument as the ED; that the IWU was closed in 1973, and therefore WMI does not have to monitor the IWU at all. There is no evidence in the record that the IWU has ever been "closed". Additionally, given the fact that we know the IWU accepted a plethora of chemicals and industrial waste materials, many of which are considered hazardous materials under the existing regulations, the TCEQ can and should require monitoring of the IWU to protect human health, welfare, and the environment.

P. 5 - The evidence demonstrated that those three monitoring wells are not even sampled for 1, 4 dioxane, which appears to be the primary contaminant leaking from the IWU. It does little good to rely on a monitoring well to inform you of a release of hazardous waste, and then not test that well for the types of contaminants that are leaking.

[November 10, 2009 City of Austin's Motion for Rehearing](#)

P. 1 – II. ERRORS IN THE INTERIM ORDER

P. 2 - "Delete the addition of the four wells specified by the private agreement between the City of Austin and WMTX to the permit's groundwater monitoring system and reconfiguration of the Point of Compliance to include those wells in proposed Finding of Fact Nos. 125 and 127, Conclusions of Law Nos. 28, 48, and 50, and Ordering Provision No. 1."

P. 3 - Although it stopped taking materials in the 1970's the Industrial Waste unit ("IWU") is still in place and is part of the facility. Additionally, there is no evidence in the record that the IWU has ever been "closed". Therefore, under a multi-unit groundwater monitoring system, under §330.403(b), all of the MSW management units must be a part of the groundwater monitoring system. Moreover, given the fact that we know the IWU accepted a plethora of chemicals and industrial waste materials, many of which are considered hazardous materials under the existing regulations, the TCEQ can and should require monitoring of the IWU to protect human health, welfare, and the environment.

[June 4, 2010 City of Austin Original Petition to Travis County District Court](#)

P. 6 – VII. COMMISSION ERRORS

P. 6 & P. 7 – (2.) The Commission erred in instructing the ALJ to make substantive revisions to those portions of his Revised Proposed Order relating to the addition of four groundwater monitoring wells to the Point of Compliance groundwater monitoring system. The Commission's instructions to the ALJ to revise his Revised Proposed Order are contrary to Commission precedent, TCEQ rules, and the laws of the State of Texas.

P. 9 - VIII. ISSUES

p. 12 - E. The failure of Applicant, WMI, to demonstrate that the expansion of the ACL facility will be protective of groundwater and surface water. The Commission's failure to acknowledge and address the significant issues with current and future threats to groundwater and surface water quality are contrary to Commission precedent and rules.

The Commission's acceptance of the Revised Proposed Order ignores the overwhelming evidence of ongoing and potential groundwater and surface water contamination at the ACL facility. The

preponderance of evidence showed: (1) that there was a history of disposal of hazardous and industrial wastes at the ACL facility; (2) that there is a continuum of waste from the IWU to the permit boundary; (3) that the continuum of waste creates a preferential pathway for contaminants to leave the ACL facility; (4) that there is evidence of groundwater contamination both at the ACL facility and on adjacent property; (5) that there is evidence of surface water contamination; and (6) that the geological characterization in the application for permit amendment is deficient. The Commission's failure to deny the application is contrary to the evidentiary record and is legal error.

P. 12 - F. The failure of Applicant, WMI to develop an adequate groundwater monitoring system that is in compliance with TCEQ rules, particularly with regard to the location of the groundwater monitoring wells, which are not located as to detect groundwater contamination from all portions of the ACL facility. The Commission's approval of the deficient groundwater monitoring system is contrary to Commission precedent, rules, and regulatory guidance on this issue.

P. 13 - The Commission, in directing the ALJ to revise substantive findings of fact and conclusions of law regarding the placement of groundwater monitoring wells, is contrary to Commission precedent, TCEQ rules, and the laws of the State of Texas. The commission further erred by accepting the Revised Proposed Findings of Fact and Conclusions of Law regarding the placement of the groundwater monitoring wells, because the Applicant failed to prove by a preponderance of the evidence that it would protect the groundwater at the ACL facility as required by the TCEQ's MSW rules because the application for permit amendment fails to meet the standards set out in 30 TAC § 330.403(a)(2), regarding monitoring at the point of compliance. The evidence demonstrated that the point of compliance groundwater monitoring system proposed in the application and approved by the Commission will not detect groundwater contamination in the uppermost aquifer at the ACL facility.

P. 14 - X. CONCLUSION

In conclusion, Plaintiff contends the TCEQ Interim Order addressed is fatally flawed and in error for the reasons set forth herein.

WHEREFORE, PREMISES CONSIDERED, Plaintiff requests that the Commission be cited and required to answer and appear herein, that a hearing be held, and that on final hearing hereof, Plaintiff City of Austin have judgment of the Court as follows:

1. Reversing and vacating the decision of the Commission and remanding the matter back to the Commission for further proceedings; and,
2. Awarding Plaintiff costs incurred, together with all other relief to which Plaintiff may be entitled.

RESOLUTION NO. 010524-70

WHEREAS, continuing concerns exist over the amount, composition, and location in or near the closed industrial waste unit at the Austin Community Landfill of the 21,000 barrels of materials identified in professional reports to be hazardous; and

WHEREAS, monitoring of the industrial waste unit is conducted on a voluntary basis and is not subject to Texas Natural Resources Conservation Commission (TNRCC) oversight or approval; and

WHEREAS, a public health risk could result from insufficient attention to or insufficient monitoring of this and other solid waste disposal sites; **NOW, THEREFORE**,

BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF AUSTIN:

The City Manager is directed to evaluate the formal monitoring program that was forwarded from Waste Management Inc. (WMI) to the City of Austin prior to February 17, 2001 and report his findings and recommendations to the City Council no later than 45 days after approval of this resolution. The evaluation should include review of the comments entitled "Discrepancies in the Human Health Risk Evaluation Report and Site Investigation Report of the Austin Community Landfill Industrial Unit", as well as monitoring results and past assessments; and

BE IT FURTHER RESOLVED:

The City Manager is directed to contact the TNRCC for discussion of a process to facilitate the sampling of the tributaries to Walnut and Gilleland Creeks adjacent to the closed industrial waste unit at the Austin Community Landfill; and

BE IT FURTHER RESOLVED:

The City Manager is directed to recommend for inclusion as part of all solid waste disposal contracts or renewals of such contracts with the city:

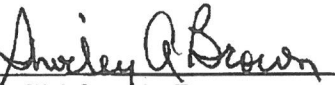
- requirements for a monitoring program that will indicate whether groundwater, surface water, or soil contamination is present at the proposed disposal site, and
- a termination clause providing that the discovery of such contamination is grounds for termination of the contract; and

BE IT FURTHER RESOLVED:

The City Manager is directed to provide a report to the City Council on the implementation of the terms of this resolution no later than 45 days after the approval of this resolution.

ADOPTED: May 24, 2001

ATTEST:


Shirley A. Brown
City Clerk

J:\Land_Use\Herrera\Resolutions\WMI mayor2.doc

RESOLUTION NO. 20100408-033

WHEREAS, on May 17, 2007 the Austin City Council unanimously adopted Resolution #20070517-030 opposing the expansion application of the Allied BFI and Waste Management Community landfills; and

WHEREAS, in 2008 the City of Austin , Travis County, the Northeast Neighbors Coalition (NNC) and TJFA, LP were designated as parties by the State Office of Administrative Hearings to oppose the Waste Management of Texas, Inc. (WMI) permit for expansion; and

WHEREAS, the City of Austin participated with the other designated parties in a contested case hearing to oppose the WMI permit; and

WHEREAS, the Administrative Law Judge recommended that the TCEQ issue the permit authorizing the expansion of WMI , and TCEQ has adopted and issued the requested permit; and

WHEREAS, the deadline to file a motion for rehearing is April 12, 2010; and

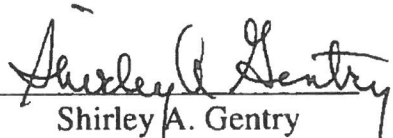
WHEREAS, Travis County, NNC and TJFA, LP are in the process of filing both a motion for rehearing and an appeal to district court; **NOW, THEREFORE,**

BE IT RESOLVED THE CITY COUNCIL OF THE CITY OF AUSTIN:

The City Manager is directed to participate in the motion for rehearing and the appeal process in TCEQ Docket No. 2006-0612-MSW; Application of Waste Management of Texas, Inc. for a Municipal Solid Waste Permit Amendment; Permit No. MSW-249D.

ADOPTED: April 8, 2010

ATTEST:


Shirley A. Gentry
City Clerk

June 9, 2017

Mr. Bob Gregory
Texas Disposal Systems

Re: Texas Disposal System's Greenhouse Gas Emissions Estimates

Dear Mr. Gregory:

The purpose of this letter is to provide clarification as to why the greenhouse gas (GHG) emissions reported to the Environmental Protection Agency (EPA) by Texas Disposal Systems (TDS) have been higher than what is actually expected to be generated.

The standard calculation methodologies approved by EPA overestimate the actual GHG emissions for TDS due to assumptions and constants that are built into the formula and do not accurately consider some of the operational measures TDS takes to reduce the generation and release of methane emissions.

For example, default values for degradable organic carbon and decay rate constant are used based on the type of waste that is typically collected and the amount of rainfall that is typically expected. Actual types of waste collected and site-specific decay rate are not used, therefore the formula assumes an excessive amount of rainfall infiltration into the waste in place resulting in a conservatively high estimate of landfill gas generated and emitted. Rainfall on the TDS landfill does not infiltrate the waste as would be expected at a typical landfill because of the method TDS utilizes to apply a six-inch thick clay daily cover, keep a small exposed working face, keep the bottom slope away from the fill area, and maintain berms that prevent storm water run-on to the working face or back into the waste. Additionally, TDS strives for dry entombment of the waste by diverting wastes with high moisture content, such as yard waste, liquid, and sludge, from the landfill. Therefore, TDS does not generate the amount of landfill gas as indicated by the EPA formulas. The landfill at TDS generates very low amounts of odor and leachate which serve as a real indicator of the amount of moisture entering the landfill, and in turn the amount of gas being generated.

Another significant element in the EPA calculation methods which lead to an overestimate of emissions is the assumption regarding the landfill gas (LFG) collection system. TDS' landfill gas collection system today covers about 15% of the area with waste in place (15 wells). This system was proactively put in place by TDS to further control and limit landfill gas emissions and odors prior to being required by the regulations. The formula assumes that landfill gas from the remaining 85% of the area with waste in place is vented directly to the atmosphere as fugitive emissions. In reality, due to the procedure of maintaining the minimum six-inch thick clay daily cover and much thicker than industry standard intermediate clay soil cover utilized by TDS, much more gas is pulled and captured from areas not directly around the 15% of the area which have gas collection wells.

The other area landfills benefit from the assumption in the EPA formula that LFG emissions are significantly captured and reduced if they have LFG collection systems that covers most of the landfill and then utilize the collected LFG in an electrical generator or flare them. This creates a false impression that TDS is not capturing and controlling a significant amount of the landfill gas being generated by the landfill since the EPA



formula does not take into account TDS' design and operating conditions that limit emissions to a small fraction of the amount calculated by the formula. TDS has reached the regulatory threshold for installing a blanket landfill gas collection system so this discrimination in the EPA formula will be eliminated for TDS in the coming years as a full system will be designed and put into operation. The design plan is currently in review with the Texas Commission on Environmental Quality. The gas collection system will be in place by March 2018, and will consist of 139 total gas collection wells. Captured gas will initially be flared, but will ultimately be used in a sustainable manner.

If you have any questions, please contact me at (512) 596-7929.

Sincerely,
Providence

A handwritten signature in black ink, appearing to read "Rajiv Y. Patel", is written over a light gray horizontal line.

Rajiv Y. Patel, PE
Managing Engineer

From: Chanslor, Emlea
Sent: Wednesday, November 08, 2017 3:37 PM
To: Raine, Woody
Subject: FW: TCE Recommendations on Landfill Criteria
Attachments: Landfill Criteria Changes.pdf

FYI

From: Sullivan, Michael
Sent: Wednesday, November 08, 2017 3:34 PM
To: Dixon, Teresa [ARR] <Teresa.Dixon@austintexas.gov>; McCombs, Jason <Jason.McCombs@austintexas.gov>; Chanslor, Emlea <Emlea.Chanslor@austintexas.gov>
Cc: Williamson, Tammie <Tammie.Williamson@austintexas.gov>
Subject: FW: TCE Recommendations on Landfill Criteria

FYI

From: Andrew Dobbs [<mailto:dobbs@texasenvironment.org>]
Sent: Wednesday, November 08, 2017 3:32 PM
To: Joshua Blaine <blaine.josh@gmail.com>; 'rojorick' <rojorick@yahoo.com>; Compost Coalition (heather-nicole@compostcoalition.com) <heather-nicole@compostcoalition.com>; cathy gattuso (cegattuso@gmail.com) <cegattuso@gmail.com>; 'Blythe Christopher' (blythechristopher@gmail.com)' <blythechristopher@gmail.com>; Kaiba White (kwhite@citizen.org) <kwhite@citizen.org>; 'kendrabones@gmail.com' <kendrabones@gmail.com>; 'triecycle@aol.com' <triecycle@aol.com>; Amanda (amanda@dumpsterproject.org) <amanda@dumpsterproject.org>; Blaine, Joshua - BC <bc-Joshua.Blaine@austintexas.gov>; Rothrock, Melissa - BC <BC-Melissa.Rothrock@austintexas.gov>; Rojo, Ricardo - BC <BC-Ricardo.Rojo@austintexas.gov>; Hoffman, Heather-Nicole - BC <bc-Heather-Nicole.Hoffman@austintexas.gov>; Gattuso, Cathy - BC <bc-Cathy.Gattuso@austintexas.gov>; Christopher, Blythe - BC <BC-B.Christopher@austintexas.gov>; White, Kaiba - BC <bc-Kaiba.White@austintexas.gov>; Joyce, Shana - BC <bc-Shana.Joyce@austintexas.gov>; Bones, Kendra - BC <bc-Kendra.Bones@austintexas.gov>; Acuna, Gerard - BC <bc-Gerard.Acuna@austintexas.gov>; Masino, Amanda - BC <bc-Amanda.Masino@austintexas.gov>
Cc: Angoori, Sam <Sam.Angoori@austintexas.gov>; Sullivan, Michael <Michael.Sullivan@austintexas.gov>
Subject: TCE Recommendations on Landfill Criteria

Commissioners—

I wanted to let you know of TCE's proposed changes to the landfill criteria presented to you tonight at Item 3C. Thank you for your consideration; the changes are presented below and attached as a PDF.

Yours,

Andrew Dobbs
 Central Texas Program Director
 Legislative Director
 Texas Campaign for the Environment
 (512) 326-5655
www.texasenvironment.org www.facebook.com/texasenvironment

1. Carbon Footprint

Strike 1B “Landfill gas beneficial use.” As of right now a landfill generating thousands of tons of methane captured for “beneficial use”--which nonetheless generates some climate impacts, as not all gas is actually captured--could get a higher score than a facility that had aggressively diverted organic materials and rigorously dry entombed their wastes, thus generating less methane. This criteria is one that can distort the actual intent of Council. The less methane, the better--regardless of whether or not it is captured.

2. Environmental, Zero Waste, and Sustainability

Strike 2B “On-site use of alternative fuels.” It is unclear whether this would be counted for or against the facility, but it could be a backdoor to incentivizing or blessing waste incineration in direct contravention of long-standing Council policy and our Zero Waste Master Plan.

Add “Complaint History” to the criteria. State enforcement of environmental regulations is lax and ineffective, and often legitimate impacts on health and quality of life are allowed so long as investigators can't verify the source of the harms days or even weeks after the initial exposure. Complaints can therefore be a better measure of the environmental and sustainability performance of a facility than compliance history alone.

Add “Local concentration of permitted waste facilities” to the criteria. Sending materials to a facility surrounded by other waste facilities can exacerbate an especially unsustainable situation. To the greatest extent possible we should avoid creating large “sacrifice zones” of our community inundated with multiple waste operations.

3. Operational Considerations

3A-3E should only consider measures above and beyond permit requirements. Experience and qualifications, contingency plans, safety measures, emergency procedures, and financial responsibility are all required in one form or another of every facility. Merely performing the measures required by minimal state requirements should not be considered as grounds for favoring one facility over another, and in fact if one facility is going above and beyond it SHOULD be given credit. Each of these need to be distinguished as the measures taken NOT required by their permit or state and federal regulation.

4. Community Impact and Social Equity

Strike or amend 4A “Diversity of workforce.” Waste management has historically been a career path our community has had no problem extending to people of color. As a result, these fields have often been disproportionately filled with African-American and Latino workers. Would we credit a facility that reflects this historical tendency as “diverse,” or would we tend to prefer sites that hire mostly Anglo white workers? The measure should either be struck or should favor sites that give top management and executive positions to people of color.

Add “Area Demographics vs. City of Austin Demographics” to the criteria. The purpose of this criteria is to discourage the city from dumping on communities of color. We can easily compare the census tracts nearest the facility in question to the racial and economic demographics of Austin to minimize dumping on sites that are disproportionately more populated by people of color or low income families. Without this criteria it does not accomplish what the policy proposals Council has intended for this process.

Add “History of City opposition in permitting” to the criteria. It is an act of hypocrisy to argue that a facility is bad for our community and then financially support that same facility, and it undermines the City's ability to credibly protest further expansions of the same facilities. The City has taken formal positions on some of these questions, and those positions should be taken into consideration in this process.

Strike 4C “Commitment to Community Relations.” This is an invitation to greenwashing. The most egregious violators of environmental standards in the waste industry are those with the biggest PR teams--we should not let such manipulations obscure the real effects their operations will have on our community.

Add “Collective Bargaining Agreement/Labor Peace Agreement” to the criteria. Wages, benefits and work conditions can erode over time, but collective bargaining from the people working at a facility can prevent or minimize such erosion. Even if a site has not yet agreed to such protections for their workers, a willingness to avoid protracted workplace strife by respecting a clear desire for collective bargaining benefits the City, working families, and the public good.

Summary of Amendments

- Strike 1B, 2B, and 4C
- Strike or Amend 4A
- Clarify that 3A-3E only count for measures over and above permit or regulatory requirements
- Add “Complaint History” to Section 2
- Add “Local concentration of permitted waste facilities” to Section 2
- Add “Area Demographics vs. City of Austin Demographics” to Section 4
- Add “History of City opposition in permitting” to Section 4
- Add “Collective Bargaining Agreement/Labor Peace Agreement” to Section 4

1. Carbon Footprint

Strike 1B “Landfill gas beneficial use.” As of right now a landfill generating thousands of tons of methane captured for “beneficial use”—which nonetheless generates some climate impacts, as not all gas is actually captured—could get a higher score than a facility that had aggressively diverted organic materials and rigorously dry entombed their wastes, thus generating less methane. This criteria is one that can distort the actual intent of Council. The less methane, the better—regardless of whether or not it is captured.

2. Environmental, Zero Waste, and Sustainability

Strike 2B “On-site use of alternative fuels.” It is unclear whether this would be counted for or against the facility, but it could be a backdoor to incentivizing or blessing waste incineration in direct contravention of long-standing Council policy and our Zero Waste Master Plan.

Add “Complaint History” to the criteria. State enforcement of environmental regulations is lax and ineffective, and often legitimate impacts on health and quality of life are allowed so long as investigators can’t verify the source of the harms days or even weeks after the initial exposure. Complaints can therefore be a better measure of the environmental and sustainability performance of a facility than compliance history alone.

Add “Local concentration of permitted waste facilities” to the criteria. Sending materials to a facility surrounded by other waste facilities can exacerbate an especially unsustainable situation. To the greatest extent possible we should avoid creating large “sacrifice zones” of our community inundated with multiple waste operations.

3. Operational Considerations

3A-3E should only consider measures above and beyond permit requirements.

Experience and qualifications, contingency plans, safety measures, emergency procedures, and financial responsibility are all required in one form or another of every facility. Merely performing the measures required by minimal state requirements should not be considered as grounds for favoring one facility over another, and in fact if one facility is going above and beyond it SHOULD be given credit. Each of these need to be distinguished as the measures taken NOT required by their permit or state and federal regulation.

4. Community Impact and Social Equity

Strike or amend 4A “Diversity of workforce.” Waste management has historically been a career path our community has had no problem extending to people of color. As a result, these fields have often been disproportionately filled with African-American and Latino workers. Would we credit a facility that reflects this historical tendency as “diverse,” or would we tend to prefer

sites that hire mostly Anglo white workers? The measure should either be struck or should favor sites that give top management and executive positions to people of color.

Add “Area Demographics vs. City of Austin Demographics” to the criteria. The purpose of this criteria is to discourage the city from dumping on communities of color. We can easily compare the census tracts nearest the facility in question to the racial and economic demographics of Austin to minimize dumping on sites that are disproportionately more populated by people of color or low income families. Without this criteria it does not accomplish what the policy proposals Council has intended for this process.

Add “History of City opposition in permitting” to the criteria. It is an act of hypocrisy to argue that a facility is bad for our community and then financially support that same facility, and it undermines the City’s ability to credibly protest further expansions of the same facilities. The City has taken formal positions on some of these questions, and those positions should be taken into consideration in this process.

Strike 4C “Commitment to Community Relations.” This is an invitation to greenwashing. The most egregious violators of environmental standards in the waste industry are those with the biggest PR teams--we should not let such manipulations obscure the real effects their operations will have on our community.

Add “Collective Bargaining Agreement/Labor Peace Agreement” to the criteria. Wages, benefits and work conditions can erode over time, but collective bargaining from the people working at a facility can prevent or minimize such erosion. Even if a site has not yet agreed to such protections for their workers, a willingness to avoid protracted workplace strife by respecting a clear desire for collective bargaining benefits the City, working families, and the public good.

Summary of Amendments

- Strike 1B, 2B, and 4C
- Strike or Amend 4A
- Clarify that 3A-3E only count for measures over and above permit or regulatory requirements
- Add “Complaint History” to Section 2
- Add “Local concentration of permitted waste facilities” to Section 2
- Add “Area Demographics vs. City of Austin Demographics” to Section 4
- Add “History of City opposition in permitting” to Section 4
- Add “Collective Bargaining Agreement/Labor Peace Agreement” to Section 4

From: Angoori, Sam
Sent: Wednesday, January 10, 2018 2:35 PM
To: Williamson, Tammie; McHale, Richard; Chanslor, Emlea; Raine, Woody
Subject: Fwd: TCE Position on Landfill Criteria

Sent from my iPhone

Begin forwarded message:

From: Andrew Dobbs <dobbs@texasenvironment.org>
Date: January 10, 2018 at 12:50:51 PM CST
To: Joshua Blaine <blaine.josh@gmail.com>, 'rojorick' <rojorick@yahoo.com>, "Compost Coalition (heather-nicole@compostcoalition.com)" <heather-nicole@compostcoalition.com>, "cathy gattuso (cegattuso@gmail.com)" <cegattuso@gmail.com>, "Blythe Christopher (blythechristopher@gmail.com)" <blythechristopher@gmail.com>, "Kaiba White (kwhite@citizen.org)" <kwhite@citizen.org>, "kendraborones@gmail.com" <kendraborones@gmail.com>, "trirecycle@aol.com" <trirecycle@aol.com>, "Amanda (amanda@dumpsterproject.org)" <amanda@dumpsterproject.org>, "bc-Joshua.Blaine@austintexas.gov" <bc-Joshua.Blaine@austintexas.gov>, "bc-melissa.rothrock@austintexas.gov" <bc-melissa.rothrock@austintexas.gov>, "BC-Ricardo.Rojo@austintexas.gov" <BC-Ricardo.Rojo@austintexas.gov>, "Hoffman, Heather-Nicole - BC (bc-Heather-Nicole.Hoffman@austintexas.gov)" <bc-Heather-Nicole.Hoffman@austintexas.gov>, "bc-Cathy.Gattuso@austintexas.gov" <bc-Cathy.Gattuso@austintexas.gov>, "BC-B.Christopher@austintexas.gov" <BC-B.Christopher@austintexas.gov>, "bc-Kaiba.White@austintexas.gov" <bc-Kaiba.White@austintexas.gov>, "bc-Shana.Joyce@austintexas.gov" <bc-Shana.Joyce@austintexas.gov>, "bc-kendra.bones@austintexas.gov" <bc-kendra.bones@austintexas.gov>, "bc-Gerard.Acuna@austintexas.gov" <bc-Gerard.Acuna@austintexas.gov>, "Masino, Amanda - BC (bc-Amanda.Masino@austintexas.gov)" <bc-Amanda.Masino@austintexas.gov>
Cc: "sam.angoori@austintexas.gov" <sam.angoori@austintexas.gov>, "Sullivan, Michael (Michael.Sullivan@austintexas.gov)" <Michael.Sullivan@austintexas.gov>
Subject: TCE Position on Landfill Criteria

January 10, 2018

Commissioners:

Forgive my tardiness on getting back to you with this. I wanted to remind you of TCE's positions on the landfill criteria and respond to staff's comments on them. At the end of the message I reiterate our suggested amendments. Thank you, and I look forward to speaking to you tonight!

Yours,

Andrew Dobbs

1. Carbon Footprint

Strike 1B “Landfill gas beneficial use.” As of right now a landfill generating thousands of tons of methane captured for “beneficial use”—which nonetheless generates some climate impacts, as not all gas is actually captured—could get a higher score than a facility that had aggressively diverted organic materials and rigorously dry entombed their wastes, thus generating less methane. This criteria is one that can distort the actual intent of Council. The less methane, the better—regardless of whether or not it is captured.

Staff’s non-concurrence suggests that they will give credit for LFG beneficial use regardless of scale of production—i.e. this is a binary use/don’t use criteria and not something that scales up with the amount of LFG used. If this is the case we drop this recommendation, but we strongly discourage any criteria which will benefit large-scale producers of methane over those that reduce production in the first place.

2. Environmental, Zero Waste, and Sustainability

Strike 2B “On-site use of alternative fuels.” It is unclear whether this would be counted for or against the facility, but it could be a backdoor to incentivizing or blessing waste incineration in direct contravention of long-standing Council policy and our Zero Waste Master Plan.

Staff says they can further clarify that this will not include any so-called “waste-to-energy” credits. If this is the case we do not object to this standard.

Add “Complaint History” to the criteria. State enforcement of environmental regulations is lax and ineffective, and often legitimate impacts on health and quality of life are allowed so long as investigators can’t verify the source of the harms days or even weeks after the initial exposure. Complaints can therefore be a better measure of the environmental and sustainability performance of a facility than compliance history alone.

Staff says that they didn’t adopt this standard because they would not be able to assess the validity of complaints, but the point is to not have to rely upon problematic and often subjective standards of “validity” at all. Filing a complaint is not a particularly simple process, and it is unlikely that any responsibly run facility would accumulate a large number of spurious complaints. Landfills that have prompted neighbors to regularly put up with the bureaucratic challenge of lodging their concerns should not be receiving City of Austin materials.

Add “Local concentration of permitted waste facilities” to the criteria. Sending materials to a facility surrounded by other waste facilities can exacerbate an especially unsustainable situation. To the greatest extent possible we should avoid creating large “sacrifice zones” of our community inundated with multiple waste operations.

Staff notes that zoning decisions can impact the outcome of where facilities are located, and it is true that Austin’s legacy of discriminatory land use policies have concentrated our waste facilities in areas where people of color tend to live. This is not a reason to perpetuate this injustice, however, and while geographic factors do impact landfill siting, the wide dispersal of operating, historic, and proposed waste facilities across the local region suggest that there is plenty of eligible land for landfills. We should not encourage the creation of these “sacrifice zones.”

3. Operational Considerations

3A-3E should only consider measures above and beyond permit requirements.

Experience and qualifications, contingency plans, safety measures, emergency procedures, and financial responsibility are all required in one form or another of every facility. Merely performing the measures required by minimal state requirements should not be considered as grounds for favoring one facility over another, and in fact if one facility is going above and beyond it SHOULD be given credit. Each of these need to be distinguished as the measures taken NOT required by their permit or state and federal regulation.

Staff says they “could give extra credit for exceeding expectations and no credit for not meeting expectations.” We should not be giving credit for merely meeting basic expectations. There should be credit given for exceeding expectations and none given for merely meeting or falling short of expectations. Present state and federal regulations are woefully inadequate. If Austin cares about protecting our air, water, land, and health we will need to demand higher standards than the basic expectations.

4. Community Impact and Social Equity

Strike or amend 4A “Diversity of workforce.” Waste management has historically been a career path our community has had no problem extending to people of color. As a result, these fields have often been disproportionately filled with African-American and Latino workers. Would we credit a facility that reflects this historical tendency as “diverse,” or would we tend to prefer sites that hire mostly Anglo white workers? The measure should either be struck or should favor sites that give top management and executive positions to people of color.

Staff concurs. Considering the diversity of management or executive leadership makes sense nonetheless.

Add “Area Demographics vs. City of Austin Demographics” to the criteria. The purpose of this criteria is to discourage the city from dumping on communities of color. We can easily compare the census tracts nearest the facility in question to the racial and economic demographics of Austin to minimize dumping on sites that are disproportionately more populated by people of color or low income families. Without this criteria it does not accomplish what the policy proposals Council has intended for this process.

Staff says that “area landfills predate their residential neighbors and the neighborhoods that continue to grow nearby.” Communities of color arose in these areas precisely because they were undesirable to people with more resources and power. Not taking these outcomes into consideration amounts to ignoring historic patterns of discrimination when making our environmental decision, a guaranteed way of perpetuating racial injustice. Staff is directly refusing to follow council direction on this matter, and without this criteria there is not means to determine the precise environmental justice impacts of our disposal decisions.

Add “History of City opposition in permitting” to the criteria. It is an act of hypocrisy to argue that a facility is bad for our community and then financially support that same facility, and it undermines the City’s ability to credibly protest further expansions of the same facilities. The City has taken formal positions on some of these questions, and those positions should be taken into consideration in this process.

Staff says “previous reasons for City opposition are included among these criteria.” If this is to say that past city opposition to a facility will be a factor in the criteria, this meets our expectations. If they are saying, however, that this past opposition is irrelevant to this criteria they are mistaken. Saying that a facility should not exist is obviously relevant to whether or not one supports that facility when its existence is forced upon you. This data needs to be available to councilmembers who may not have been around for previous fights, and council opposition should have a lasting material impact on these facilities.

Strike 4C “Commitment to Community Relations.” This is an invitation to greenwashing. The most egregious violators of environmental standards in the waste industry are those with the biggest PR teams--we should not let such manipulations obscure the real effects their operations will have on our community.

Staff says “Neighboring civic groups, neighborhood associations, and neighbors that have been negatively impacted by a facility are unlikely to be manipulated by public relation teams to provide letters of support for a proposing facility.” If the standard is endorsement by neighboring civic groups and neighborhood associations then we would be supportive of this criteria. A vague “commitment to community relations” gives landfills the power to get points under the criteria for performative and manipulative actions. It is a subjective measure at this point—it needs to be objective or it should be eliminated. This must be amended or eliminated.

Add “Collective Bargaining Agreement/Labor Peace Agreement” to the criteria. Wages, benefits and work conditions can erode over time, but collective bargaining from the people working at a facility can prevent or minimize such erosion. Even if a site has not yet agreed to such protections for their workers, a willingness to avoid protracted workplace strife by respecting a clear desire for collective bargaining benefits the City, working families, and the public good.

City policies can change and contracts come to an end. The City should not abandon employees of previous contractors to lower than living wages or dangerous work conditions, and should use its influence and purchasing power to favor operations that help their employees protect their pay, benefits, and conditions through collective bargaining

Summary of Latest Amendments Following Staff Review

- Clarify that 1B is a binary pass/fail criterion that does not give more points for more LFG production
- Clarify that 2B will exclude any “waste-to-energy” processes with the possible exception of landfill gas-to-energy
- Add “Complaint History” to the Environmental, Waste, and Sustainability criteria
- Add “Local concentration of permitted waste facilities” to the Environmental, Waste, and Sustainability criteria
- 3A-3E should only consider measures over and above permit requirements, merely meeting regulatory requirements does not count for points under any City of Austin criteria
- Strike 4A “Diversity of Workforce” or amend to seek diversity of management and executive leadership.
- Add “Area Demographics vs. City of Austin demographics” to the Community Impact and Social Equity criteria

- Add “History of City opposition in permitting” to the Community Impact and Social Equity criteria
- Replace 4C with “Endorsement by neighboring civic groups and neighborhood associations”
- Add “Collective Bargaining Agreement/Labor Peace Agreement” to criteria

Andrew Dobbs
Central Texas Program Director
Legislative Director
Texas Campaign for the Environment
(512) 326-5655
www.texasenvironment.org www.facebook.com/texasenvironment

From: Andrew Dobbs <dobbs@texasenvironment.org>

Date: January 10, 2018 at 12:50:51 PM CST

To: Joshua Blaine <blaine.josh@gmail.com>, 'rojorick' <rojorick@yahoo.com>, "Compost Coalition (heather-nicole@compostcoalition.com)" <heather-nicole@compostcoalition.com>, "cathy gattuso (cegattuso@gmail.com)" <cegattuso@gmail.com>, "Blythe Christopher (blythechristopher@gmail.com)" <blythechristopher@gmail.com>, "Kaiba White (kwhite@citizen.org)" <kwhite@citizen.org>, "kendrabones@gmail.com" <kendrabones@gmail.com>, "triecycle@aol.com" <triecycle@aol.com>, "Amanda (amanda@dumpsterproject.org)" <amanda@dumpsterproject.org>, "bc-Joshua.Blaine@austintexas.gov" <bc-Joshua.Blaine@austintexas.gov>, "bc-melissa.rothrock@austintexas.gov" <bc-melissa.rothrock@austintexas.gov>, "BC-Ricardo.Rojo@austintexas.gov" <BC-Ricardo.Rojo@austintexas.gov>, "Hoffman, Heather-Nicole - BC (bc-Heather-Nicole.Hoffman@austintexas.gov)" <bc-Heather-Nicole.Hoffman@austintexas.gov>, "bc-Cathy.Gattuso@austintexas.gov" <bc-Cathy.Gattuso@austintexas.gov>, "BC-B.Christopher@austintexas.gov" <BC-B.Christopher@austintexas.gov>, "bc-Kaiba.White@austintexas.gov" <bc-Kaiba.White@austintexas.gov>, "bc-Shana.Joyce@austintexas.gov" <bc-Shana.Joyce@austintexas.gov>, "bc-kendra.bones@austintexas.gov" <bc-kendra.bones@austintexas.gov>, "bc-Gerard.Acuna@austintexas.gov" <bc-Gerard.Acuna@austintexas.gov>, "Masino, Amanda - BC (bc-Amanda.Masino@austintexas.gov)" <bc-Amanda.Masino@austintexas.gov>

Cc: "sam.angoori@austintexas.gov" <sam.angoori@austintexas.gov>, "Sullivan, Michael (Michael.Sullivan@austintexas.gov)" <Michael.Sullivan@austintexas.gov>

Subject: TCE Position on Landfill Criteria

January 10, 2018

Commissioners:

Forgive my tardiness on getting back to you with this. I wanted to remind you of TCE's positions on the landfill criteria and respond to staff's comments on them. At the end of the message I reiterate our suggested amendments. Thank you, and I look forward to speaking to you tonight!

Yours,

Andrew Dobbs

1. Carbon Footprint

Strike 1B "Landfill gas beneficial use." As of right now a landfill generating thousands of tons of methane captured for "beneficial use"--which nonetheless generates some climate impacts, as not all gas is actually captured--could get a higher score than a facility that had aggressively diverted organic materials and rigorously dry entombed their wastes, thus generating less methane. This criteria is one that can distort the actual intent of Council. The less methane, the better--regardless of whether or not it is captured.

Staff's non-concurrence suggests that they will give credit for LFG beneficial use regardless of scale of production—i.e. this is a binary use/don't use criteria and not something that scales up with the amount of LFG used. If this is the case we drop this recommendation, but we strongly discourage any criteria which will benefit large-scale producers of methane over those that reduce production in the first place.

2. Environmental, Zero Waste, and Sustainability

Strike 2B “On-site use of alternative fuels.” It is unclear whether this would be counted for or against the facility, but it could be a backdoor to incentivizing or blessing waste incineration in direct contravention of long-standing Council policy and our Zero Waste Master Plan.

Staff says they can further clarify that this will not include any so-called “waste-to-energy” credits. If this is the case we do not object to this standard.

Add “Complaint History” to the criteria. State enforcement of environmental regulations is lax and ineffective, and often legitimate impacts on health and quality of life are allowed so long as investigators can’t verify the source of the harms days or even weeks after the initial exposure. Complaints can therefore be a better measure of the environmental and sustainability performance of a facility than compliance history alone.

Staff says that they didn’t adopt this standard because they would not be able to assess the validity of complaints, but the point is to not have to rely upon problematic and often subjective standards of “validity” at all. Filing a complaint is not a particularly simple process, and it is unlikely that any responsibly run facility would accumulate a large number of spurious complaints. Landfills that have prompted neighbors to regularly put up with the bureaucratic challenge of lodging their concerns should not be receiving City of Austin materials.

Add “Local concentration of permitted waste facilities” to the criteria. Sending materials to a facility surrounded by other waste facilities can exacerbate an especially unsustainable situation. To the greatest extent possible we should avoid creating large “sacrifice zones” of our community inundated with multiple waste operations.

Staff notes that zoning decisions can impact the outcome of where facilities are located, and it is true that Austin’s legacy of discriminatory land use policies have concentrated our waste facilities in areas where people of color tend to live. This is not a reason to perpetuate this injustice, however, and while geographic factors do impact landfill siting, the wide dispersal of operating, historic, and proposed waste facilities across the local region suggest that there is plenty of eligible land for landfills. We should not encourage the creation of these “sacrifice zones.”

3. Operational Considerations

3A-3E should only consider measures above and beyond permit requirements. Experience and qualifications, contingency plans, safety measures, emergency procedures, and financial responsibility are all required in one form or another of every facility. Merely performing the measures required by minimal state requirements should not be considered as grounds for favoring one facility over another, and in fact if one facility is going above and beyond it SHOULD be given credit. Each of these need to be distinguished as the measures taken NOT required by their permit or state and federal regulation.

Staff says they “could give extra credit for exceeding expectations and no credit for not meeting expectations.” We should not be giving credit for merely meeting basic expectations. There should be credit given for exceeding expectations and none given for merely meeting or falling short of expectations. Present state and federal regulations are woefully inadequate. If Austin cares about protecting our air, water, land, and health we will need to demand higher standards than the basic expectations.

4. Community Impact and Social Equity

Strike or amend 4A “Diversity of workforce.” Waste management has historically been a career path our community has had no problem extending to people of color. As a result, these fields have often been disproportionately filled with African-American and Latino workers. Would we credit a facility that reflects this

historical tendency as “diverse,” or would we tend to prefer sites that hire mostly Anglo white workers? The measure should either be struck or should favor sites that give top management and executive positions to people of color.

Staff concurs. Considering the diversity of management or executive leadership makes sense nonetheless.

Add “Area Demographics vs. City of Austin Demographics” to the criteria. The purpose of this criteria is to discourage the city from dumping on communities of color. We can easily compare the census tracts nearest the facility in question to the racial and economic demographics of Austin to minimize dumping on sites that are disproportionately more populated by people of color or low income families. Without this criteria it does not accomplish what the policy proposals Council has intended for this process.

Staff says that “area landfills predate their residential neighbors and the neighborhoods that continue to grow nearby.” Communities of color arose in these areas precisely because they were undesirable to people with more resources and power. Not taking these outcomes into consideration amounts to ignoring historic patterns of discrimination when making our environmental decision, a guaranteed way of perpetuating racial injustice. Staff is directly refusing to follow council direction on this matter, and without this criteria there is not means to determine the precise environmental justice impacts of our disposal decisions.

Add “History of City opposition in permitting” to the criteria. It is an act of hypocrisy to argue that a facility is bad for our community and then financially support that same facility, and it undermines the City’s ability to credibly protest further expansions of the same facilities. The City has taken formal positions on some of these questions, and those positions should be taken into consideration in this process.

Staff says “previous reasons for City opposition are included among these criteria.” If this is to say that past city opposition to a facility will be a factor in the criteria, this meets our expectations. If they are saying, however, that this past opposition is irrelevant to this criteria they are mistaken. Saying that a facility should not exist is obviously relevant to whether or not one supports that facility when its existence is forced upon you. This data needs to be available to councilmembers who may not have been around for previous fights, and council opposition should have a lasting material impact on these facilities.

Strike 4C “Commitment to Community Relations.” This is an invitation to greenwashing. The most egregious violators of environmental standards in the waste industry are those with the biggest PR teams--we should not let such manipulations obscure the real effects their operations will have on our community.

Staff says “Neighboring civic groups, neighborhood associations, and neighbors that have been negatively impacted by a facility are unlikely to be manipulated by public relation teams to provide letters of support for a proposing facility.” If the standard is endorsement by neighboring civic groups and neighborhood associations then we would be supportive of this criteria. A vague “commitment to community relations” gives landfills the power to get points under the criteria for performative and manipulative actions. It is a subjective measure at this point—it needs to be objective or it should be eliminated. This must be amended or eliminated.

Add “Collective Bargaining Agreement/Labor Peace Agreement” to the criteria. Wages, benefits and work conditions can erode over time, but collective bargaining from the people working at a facility can prevent or minimize such erosion. Even if a site has not yet agreed to such protections for their workers, a willingness to avoid protracted workplace strife by respecting a clear desire for collective bargaining benefits the City, working families, and the public good.

City policies can change and contracts come to an end. The City should not abandon employees of previous contractors to lower than living wages or dangerous work conditions, and should use its influence and purchasing power to favor operations that help their employees protect their pay, benefits, and conditions through collective bargaining

Summary of Latest Amendments Following Staff Review

- Clarify that 1B is a binary pass/fail criterion that does not give more points for more LFG production
- Clarify that 2B will exclude any “waste-to-energy” processes with the possible exception of landfill gas-to-energy
- Add “Complaint History” to the Environmental, Waste, and Sustainability criteria
- Add “Local concentration of permitted waste facilities” to the Environmental, Waste, and Sustainability criteria
- 3A-3E should only consider measures over and above permit requirements, merely meeting regulatory requirements does not count for points under any City of Austin criteria
- Strike 4A “Diversity of Workforce” or amend to seek diversity of management and executive leadership.
- Add “Area Demographics vs. City of Austin demographics” to the Community Impact and Social Equity criteria
- Add “History of City opposition in permitting” to the Community Impact and Social Equity criteria
- Replace 4C with “Endorsement by neighboring civic groups and neighborhood associations”
- Add “Collective Bargaining Agreement/Labor Peace Agreement” to criteria

Andrew Dobbs

Central Texas Program Director

Legislative Director

Texas Campaign for the Environment

(512) 326-5655

www.texasenvironment.org www.facebook.com/texasenvironment

From: McHale, Richard
Sent: Friday, January 19, 2018 1:39 PM
To: Raine, Woody
Subject: Fwd: Emailing: Letter to the City - PDF 1.19.18
Attachments: Letter to the City - PDF 1.19.18.pdf; ATT00001.htm

Sent from my iPhone

Begin forwarded message:

From: Chris Thomas <ChrisTh@WasteConnections.com>
Date: January 19, 2018 at 1:34:07 PM CST
To: "'Richard.McHale@austintexas.gov'" <Richard.McHale@austintexas.gov>
Cc: Steve Shannon <steve.shannon@progressivewaste.com>
Subject: Emailing: Letter to the City - PDF 1.19.18

Richard,

The attached letter outlines our concerns with the draft landfill criteria. We appreciate the opportunity to comment and work toward a fair and equitable solution.

Thank you,

Chris Thomas
Division Vice President
9904 FM812
Austin, TX 78719
Cell: 360-903-7354
email: christh@wasteconnections.com



WASTE CONNECTIONS, INC.
Connect with the Future™

Mr. Richard McHale
Interim Assistant Director
Resource Recovery Department
City of Austin
P.O. Box 1088
Austin, Texas 78767

Mr. McHale:

Waste Connections appreciates the extension of the comment period pertaining to the Draft Landfill Criteria that is currently under review.

Our principle concern is, that if the criteria is constraining to the degree that only one disposal facility is eligible to receive wastes generated from City solid waste collection programs, and the operator of that facility is also a bidder on the collection solicitations, it could create a situation where that entity will always win the collection contracts. This is because the operator of the sole eligible disposal facility can charge themselves whatever internal rate (charge) that they want and charge other collection service bidders a higher disposal price. This situation presents financial risks to the City because, under the above described scenario, the sole facility operator/collector can control the price by quoting exorbitant disposal fees to the other potential collection bidders and win the collection bid for themselves at a price that may be significantly higher than would be available if at least two competing disposal facilities were eligible to receive the wastes.

We have consistently expressed throughout the Solid Waste Policy Focus Group process, to that group, City Council, ZWAC and to the Ethics Commission that we, in the Austin market, want a level and fair playing field for the solicitation of solid waste services. That is in the best interest of the City, the public and the industry by insuring fair and even competition.

We appreciate your consideration of our comments. If you have any questions please let us know.

Respectfully,

Chris Thomas
Divisional Vice President
Waste Connections
Austin, Texas